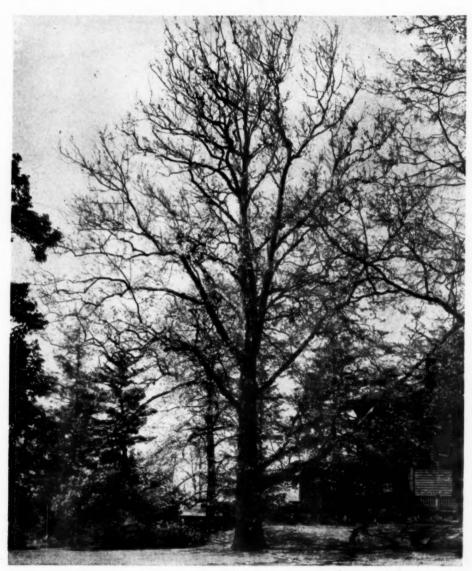
AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

DECEMBER 15, 1944



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The Nurseryman's Forte: To Make America More Beautiful and Fruitful

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AMERICAN NURSERYMAN

F. R. KILNER, Editor

Editorial

CHRISTMAS, 1944.

This season our nation feels nearer to the Christmas spirit than at the holiday time in any of the long years since Pearl Harbor. Many homes are saddened by the memory of the sons who will never return, while millions of others feel the absence of their boys and girls gone overseas. Yet they and the rest of the nation are cheered and heartened by the hope that the end of the war, at least in Europe, is in sight and that peace on earth is not so distant and dim a prospect as a year ago.

The families at home feel their burdens lightened, though restrictions and shortages continue, since the goal of their purpose is nigh. As we learn more of the tragic misfortunes of European combatants, and as we realize more definitely the hardships of our relatives overseas, we feel in America more reason than ever before to give thanks for our unparalleled good fortune. Our homes are intact and our dwellings await undamaged the return of those who are away.

Doing their part to keep those dwellings and this land of ours beautiful and fruitful for the return of peace, nurserymen have reason to be thankful for their calling and their condition, despite the difficulties of the war era. They have maintained their service to the public to the best of their ability, and their record gives reason for pride. For their association and participation the editorial greetings at the yuletide are grateful and warm, though they will be merrier for all when peace arrives anon.

PROMOTING OUR MARKET.

When the federal authorities called the garden conference at Washington in 1941, the occurrence of the disaster at Pearl Harbor between the time the meeting was announced and the dates on which it was held turned the thoughts of all those present to the important subject of food production in a country at war. The succeeding three years have disclosed a response on the part of the public, under the leadership of those whose profession, trade or hobby afforded gardening knowledge, that has surpassed the predictions of the most op-timistic. If the estimates of the federal authorities are followed, the comfortable food situation of this coun-

The Mirror of the Trade

try is due in no little part to the millions of victory gardeners, whatever their exact number.

This surge of public interest in gardening has awakened in many a vision which they did not have before as to the possibilities of beautifying our homes, our communities and our country. The small voice of the nurseryman crying about a beautiful and fruitful America, about an outdoor living room and about a dwelling's not being a home until it's planted, is no longer weak and alone.

The national garden conference held at Washington last month, bevond recommending the continuation of food production on a war basis another year, turned its attention to the postwar possibilities in gardening. What has been said among nurserymen already-that the tremendous interest in vegetable gardening would turn in some part to ornamental gardening-was recognized by all those at the conference. The proposals recommended by the participants envisioned a growth in gardening beyond anything in this country hitherto. The measures approved would foster and promote the public interest, not only through the present state agencies, but by a special supervisory group in the United States Department of Agriculture itself.

Full space has been given to a report of the conference in this issue, and the text of the recommendations will be published in detail when released, so that nurserymen may realize what promotional effort is on foot. Many hands are ready to help promote our market. They should have our cooperation and assistance. An opportunity opens that brings with it a public responsibility.

BUILDING PREDICTIONS.

Estimates of the amount of home building which is to be done after the end of the war are numerous these days. Some seem overoptimistic and some seem conservative. But in either case, the landscaping of a fraction of the number of homes to be built will make plenty of business for nurserymen.

The National Housing Agency recently estimated that 12,600,000 nonfarm houses and apartment units will be needed in the first postwar decade. This would mean a yearly building of 1,260,000 units for the nation, more than half a million over the average in the 1920's.

The last Office of Civilian Requirements consumer survey showed an immediate demand for homes alone of 3,700,000, or more than 1,000,000 yearly for the first three postwar years.

Estimates of probable actual construction by the Producers' Council, probably the most reliable estimate, show a potential for residential building of 972,000 dwelling units for the 5-year period beginning two years after the end of the war.

OPA Administrator Chester Bowles, blueprinting postwar prosperity, said that the nation could spend 250 per cent more on all construction after the war than in 1940. More conservative, the Producers' Council figures indicate a 167 per cent increase in expenditures for all construction over the 1938-1940 average, and a 210 per cent increase in residential construction expenditures.

The NHA goal of residential construction would exceed by 300,000 yearly the 1925 building peak, when 930,000 units went up.

None of these figures can be considered an absolute prediction of the widely heralded building boom. But they all add up to a building boom to dwarf anything seen in the past.

CORRECTION.

Observant readers who were puzzled by the caption underneath the lower illustration on page 5 of the December 1 issue probably discovered for themselves that the cut had been set upside down in the page by the printer. Those who did not obtain the usefulness of the illustration by reversing the order of the items in the caption, but merely thought the caption writer was temporarily out of his mind, have this apology from the editor, in behalf of a proofreader who should have known better.

MAIL COPY EARLY.

Present printing conditions require that more time be given for putting current issues of the American Nurseryman through the press. So if you send material for either the advertising or the news columns of the January 1 issue, please mail in time to reach this office by December 26.

National Garden Conference

Ornamental gardening supplanted food in primary attention at the na-tional victory garden conference held under the auspices of the United States Department of Agriculture, at Washington, D. C., November 28 and 29, in contrast to the original gathering held under the shadow of the Pearl Harbor disaster. About 125 persons represented garden organizations, civic groups, horticultural trade interests and governmental agencies.

They studied the results of victory gardening efforts so far in the war period and considered the need for their continuance. Consideration was given to a national garden program in the postwar period for its aesthetic

value.

The first conclusion reached by the conference was to continue the promotion of victory gardens with a national goal of 20,000,000 gardens in 1945. Other conclusions reached by the conference were embodied in the recommendations of five committees, which were submitted to the conference as a whole and adopted unanimously. Among these were recommendations that practical gardening be taught in the public schools, the trend to include ornamentals in victory gardens be encouraged, home planting of fruits be fostered, state extension services be extended to urban communities as well as rural districts, efforts be intensified to expand roadside plantings, and commemorative plantings be established throughout the country.

Reflection of the increasing importance of ornamental horticulture appeared in several recommendations adopted by the conference. One was that a division of ornamental horticulture be set up in the bureau of plant industry of the United States Department of Agriculture. Another was that one or more specialists in ornamental horticulture be employed in each state. Still another was that a specialist in ornamental horticulture be engaged by the extension service of the United States Department of Agriculture to coordinate the extension work of the various states.

The conference opened promptly November 28 in the auditorium of the United States Department of Agriculture under the chairmanship of Prentice Cooper, governor of the state of Tennessee. He announced the purposes of the conference, to obtain a better understanding of the country's food needs for next year and the part of victory gardens in its

production, and to consider postwar aspects of gardening for a more healthful and beautiful America gen-

Judge Marvin Jones, war food administrator, sounded the keynote of the conference when he discussed the subject, "Why We Should Keep On With Our Home Gardens." His premise was that war cannot be carried on without food any more than without munitions, planes, tanks, etc., and it is better to have more than enough than less. Judge Jones stated: "Our food production goals for 1945 call for another year of full production. We are asking the farmers to equal the marvelous record of 1944, and while we have not suggested a goal for victory gardens, gardeners on farms and in cities would do well next year to equal their own good record of this year."

M. L. Wilson, director of cooperative extension work for the War Food Administration, addressed the



conference on "Gardens Now and After Victory." He declared that the victory garden movement of the second world war will go down in history as one of the greatest civilian activities ever stimulated and organized by man. He expressed much interest in the psychological factors in gardening and the increasing interest on the part of the medical profession in what he described as psychosomatic medicine. His interest in the subject was revealed in his extensive report on the subject.

The long-term future of gardening had the serious consideration of Mr. Wilson, who pointed out the need for professional guidance for gardeners. In this connection, Mr. Wilson said: "I want to lay before this conference the proposal that it consider the advisability of and recommend the appointment of urban extension agents professionally trained in gardening and horticulture to serve urban gardeners with their many garden problems. State directors of extension have been advised that war

food emergency funds may be used for the employment of such agents and have been urged to do so. If this type of service is to be a permanent thing after the war, the demand must, of course, come locally and through the sponsorship of organizations and institutions such as are represented at this conference. Such extension agents would work with city and urban horticultural and garden groups as the county agricultural agent works

with farm groups."
H. W. Hochbaum, of the extension service of the War Food Administration, described a victory garden program for 1945 and gave suggestions for a postwar program, noting in detail the help which the United States Department of Agriculture will extend through the federal and state extension services. Mr. Hochbaum noted that a recent survey showed that there were approximately 18,-500,000 gardens in 1944; of these, approximately 6,000,000 were on farms and about 12,500,000 were in towns, cities and suburban areas. As a result of studies made by the department, Mr. Hochbaum outlined a 10point program, including city victory gardens, farm victory gardens, long-season gardens, fruit growing, employee gardens, school gardens, community and vacant lot gardens, leadership in gardening, beautification of home grounds and beautification of America.

On the beautification of home grounds and the beautification of America he said:

"Victory gardeners, rightly so, are including the growing of some flowers in their home gardens. This broad interest, where space permits, should be encouraged that flowers as well as vegetables grace the family table. Coupled with this should be every encouragement for the beautification of home grounds, lawns, shrubs and trees that the home place be made as attractive as possible, by screening out unsightly vistas and objects, obtaining privacy and providing an outdoor living room for recreation. We are coming more and more to appreciate the outdoors. When the back yard is made to be an attractive adjunct to the house, we can more easily enjoy the sunshine, fresh air and cheering greenery which should be every family's right and pleasure.'

Mr. Hochbaum continued: "Deeper than this is the need for stimulating a much greater national interest in the problem of civic and countryside improvement and beautification,

that everyday living be made more beautiful and enriching. Local and state garden committees can well build on the great current interest and experience in gardening and develop appraisals of local situations and needs, then organize a postwar program of recommendations which public and private groups may accept and gradually carry out. Included in such appraisals and programs may be (1) the need for parks, parkways and playgrounds, (2) the improvement of approaches to towns and cities to make them more sightly, (3) the improvement of housing conditions in industrial and low income areas, (4) planning projected housing developments to provide maximum outdoor space, lawn, trees, greenery and recreation, (5) obtaining the cooperation of property owners and real estate subdividers so to plan new residence areas that sufficient garden space will be provided for each lot and that the planning and layout of the streets and alleys will be such as to make for the most harmonious and beautiful living surroundings, (6) improving and beautifying water fronts and adjoining country and woods areas, (7) landscaping of school grounds, public buildings and churches and improving and better maintaining cemeteries, (8) removing unsightly roadside stands and advertisements, (9) encouraging nurserymen to recommend and provide some of the more desirable kinds of plants for foundation planting and the landscaping of home grounds."

The morning session of the conference was concluded with a discussion by Richardson Wright, editor of House and Garden, New York, on "How to Make America More Beautiful," and a report by Mrs. Stephen J. Van Hoesen, New York, on the therapeutic value of gardening in an army hospital at Camp Kilmer.

The afternoon session of the conference was devoted to two discussions, on "The Need for More Home Fruit Planting," by Dr. G. H. Gourley, of the department of horticulture at Ohio State University, and "Our Present and Postwar Needs for Industrial Gardens," by Lester J. Norris, St. Charles, Ill., food director for the state of Illinois. The high light of Mr. Norris' remarks was a statement that industrial leaders throughout the country are willing to back a long-term gardening program after their experience of the past two years.

At the conclusion of the program of addresses the large group was divided into five committees, whose chairmen and topics were: E. L. D. Seymour, editor of the American Home, New York, victory garden

program for 1945; T. J. Talbert, University of Missouri, home fruit planting; Paul R. Krone, Michigan State College, urban home grounds and civic improvements; A. O. Rasmussen, Pennsylvania extension horticulturist, rural home grounds and community improvements; E. J. Moore, United States Department of Agriculture, promoting victory and postwar garden and improvement programs.

The final session of the conference was held Wednesday afternoon, November 29, when the committee reports were presented for discussion and adoption.

Mr. Seymour's committee recommended that a national goal of 20,



000,000 better victory gardens in 1945 be set, that all victory garden organizations give attention to schools and that the subject of practical gardening be taught in the public school system, and that the accelerated trend to include ornamentals in garden plantings be encouraged.

Professor Talbert's committee recommended that home planting of fruits be included in a well balanced program of gardening, suggesting that gardeners plant only fruits recommended for local conditions and that advice be given on which varieties can be grown with a minimum of care.

Mr. Krone's committee enthusiastically endorsed the suggestions of H. W. Hochbaum regarding the beautification of home grounds and the beautification of America and included his suggestions in its recommendation. This committee also recommended that a division of ornamental horticulture be set up within the bureau of plant industry of the United States Department of Agriculture, that sufficient personnel be furnished the division to handle the extension phases and that one or more

specialists in ornamental horticulture be employed in each state.

The committee headed by A. O. Rasmussen recommended the encouragement of the beautification of rural home grounds, the expansion of state extension services, the sponsoring of commemorative plantings by service and garden organizations, the expansion of roadside plantings, the beautification of veterans' hospitals and the appointment of a specialist in ornamental horticulture to coordinate extension work in the various states.

Mr. Moore's committee recommended that the Department of Agriculture and various horticultural groups start making postwar plans for gardening activities, that industrial organizations be encouraged to continue the victory garden movement with the thought of making gardens a permanent project and that the Department of Agriculture offer the services of a horticultural extension agent to coordinate state services.

Nurserymen in attendance at the conference were J. Franklin Styer, Styer's Nurseries, Concordville, Pa.; Eugene S. Boerner, Jackson & Perkins Co., Newark, N. Y.; Thomas D. Faulkner, C. R. Burr & Co., Manchester, Conn.; Robert Pyle, Conard-Pyle Co., West Grove, Pa.; Harry E. Malter, Greening Nursery Co., Monroe, Mich.; Paul Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Mo., and Howard Taylor, Rosedale Nurseries, East View, N. Y. Richard P. White, A. A. N. executive secretary, Washington, D. C., was an active participant.

UNITED HORTICULTURE.

An informal meeting of persons interested in some form of united horticultural organization in the United States was held during the victory garden conference at Washington, D. C., November 28. About sixty-five were in attendance.

Robert Pyle, West Grove, Pa., who proposed the meeting, presented his plan "for cooperation and to coordinate and promote the objectives of all horticultural groups in all sections." He proposed the organization of an American Horticultural Union. There were almost as many speakers on the subject as there were persons in the room. At the conclusion of the evening it was voted to endorse such a movement, and it was left to Mr. Pyle to call a meeting of all those interested - amateurs, scientists, professional and commercial people study the possibilities of forming an organization in which all current horticultural activities should be represented.

Fruit Characteristics in Rose Family

PART II

By Leon Croizat

Everything I am to state concerning details in this, the second article on the winter identification of the rose family, must be taken with several grains of salt. If I write, for instance, that such and such plant bears three buds at a certain place, I know beforehand that someone will always find a branch of this same plant bearing one or five buds where only three should normally be seen.

It might well be asked, then, why should anything be said at all, if noth-

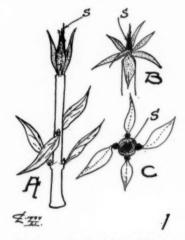


Figure 1.—Terminal bud: Manner of formation in A; the bud with its scales pulled down in B; section through the bud in C, showing the position of the leaves and their buds, with terminal bud as a black dot in S.

ing is ever to turn up certainly true. This question is logical, but it happens here to miss the point at stake. The point is this: Details may vary, and do indeed vary, so that they cannot be taken for any more than they are worth, and the reader not only had better know it, but also should know something of the why of it. However, beyond the details stand generalities of a permanent nature, well worth learning, but little publicized as yet. Generalities of the kind cannot be brought forward unless details are mentioned at least as examples. Moreover, it is the generalities that count in the long run, for without them details are a headache, when not an indigestion.

We are currently informed that the rose family has pseudoterminal buds, or words to that effect. Since this means a great deal in practice, but little as it reads in a word of five syllables, let us see how things stand.

For the purpose, let us lay before us the shoot of some plant which bears leaves strictly facing each other (opposite leaves, that is) and arranged crosswise as to pairs (decusate, in technical parlance). When growth slows down, and the leaves are turned into bud scales, the growing tip itself ends by being incased (figure 1) within scales in fours exactly arranged in the standard pattern of the leaves. Naturally, a bud forms plumb on the center line of the shoot, which bud is absolutely terminal, because it puts a seal, as it were, upon the end of the year's growth.

Let us next take in hand a twig. the leaves of which are whorled. The moment the leaves begin to change into bud scales, they establish a comparatively large bud capping the year's growth (figure 2), which happens in rhododendrons and is practically patterned after a head of cabbage. If we were carefully to pull out the scales of such a bud as this, we should find in the end the whole tip of the shoot occupied by many buds (figure 2, C), each one of which stands at the foot of a scale. We might quite as easily find that one bud (figure 2, D) has crowded out the others, and appears to be terminal. Naturally, by taking a section through a large bud of this sort, we learn that it actually consists of a nest



Figure 2.—Apical bud: Manner of formation in A; section through the bud in B, showing the partial buds as black dots, the nearest one to the center line of the shoot in S; how the bud would look with its scales removed in C (partial buds all free standing) and D (one partial bud looking terminal having crowded the other buds out).

of buds, none of which sits plumb on the center line of the shoot, though some may come close to it (figure 2, B; see S). A large compound bud of this nature is properly known as

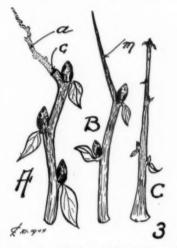


Figure 3.—Falsely apical buds: Standard manner of formation in A, the dying-off tip of the branchlet in a, with the scar it leaves at falling in g; the tip of the branchlet becoming a thorn in B; a thornlike branchlet ending with a falsely apical bud in C.

apical, for it incases the apex of the twig, but it cannot be said to be terminal for self-evident reasons.

Thirdly, in a great many plants the twig comes to a dead stop past the topmost bud (figure 3), which becomes thus falsely apical. The dyingout end of the twig may be (a) shed off as if by clean-cut pruning (figure 3, A), in which case a marked scar is left by the base of the bud; (b) retained as a hardened thorn (figure 3, B). There are endless variations of details within these two patterns. In one, for instance (figure 3, C), the twig tapers off markedly, thornlike, but instead of being prickly at the very end, it there puts out a diminutive bud; in another, the thorn, so to speak, remains comparatively soft and bears abortive buds.

In the rose family the buds are never terminal, for no bud can ever be so in plants with whorled leaves. However, all the patterns and arrangements shown in figure 2 and figure 3 appear in it, which in itself explains why no statements of detail are advisable. Most baffling to anyone unfamiliar with the generalities just stated is the presence of, let us say, two apical buds in a cherry (fig-

ure 4, B) with three well marked leaf scars. This, of course, entails no great marvel; it merely means that one bud, the topmost possibly, had decided not to come out after all, but to remain behind its leaf scar in full hiding. The true tip of the twig in all arrangements based on figure 2 gets

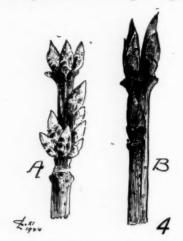


Figure 4.—Cherries: Sour cherry (Prunus cerasus in A; European bird cherry (Prunus padus) in B.

lost in a welter of buds which jostle each other and can be traced back, as a rule, by an exacting search only.

If all patterns shown in figure 2 and figure 3 may occur in the rose family, it is well to recall that they do not necessarily occur at random. The arrangements of figure 2, for instance, are characteristics of the topmost buds of the cherry and plum groups (figure 2, C; figure 4; figure 5); of that of apples, hawthorns and pears (figure 2, D; figure 6). The first arrangement of figure 3 (3, A) is definitely rare on the whole; that of figure 3, B very common for the Japanese quince and fairly common for pears; it also occurs-particularly on lateral shoots-in several plums (Prunus spinosa, the common sloe plum; Prunus americana, Prunus angustifolia and Prunus umbellata), being all the more frequent if the plant itself has grown in unfavorable surroundings. A pattern of this same nature, though modified in detail, appears in prinsepia (figure 7, C); the thorn is stiff, short and often recurved, and stands next above a peculiarly shaped leaf scar, by all of which, as well as by the long-persisting leaves and the grayish color of the bark, most prinsepias are easily identified in winter. The arrangement of figure 3, C often shows up in seedling apples and is not rare in hawthorns.

As I have stated, the tip of the

twig is occupied in cherries and plums (figure 4, figure 5) as a rule by several buds, which are more or less free-grown. Abortive leaflets or stipules (wings of the foot of the leaf, mostly persisting at the sides of the leaf scar) occur scattered between the buds, being quite conspicuous (figure 5, A) in Prunus tomentosa. When leafless, the twigs of certain cherries are reminiscent of oaks, but, aside from the details of the color and the bud scales, these cherries can almost all be readily recognized by the odor of the bruised bark and the taste. All in all, while almost nothing bears being put down in writing, pretty much everything reveals to an experienced eye a cherry or a plum in winter, be it only to judge from a scrap of branchlet.

Always in plums and cherries, the side of the twig is occupied by buds which tend to cluster in groups of between two to six or more at each leaf scar (figure 4, figure 5). On certain species, and on older wood, a great many small buds (figure 5, S, S1,) may be borne upon peculiar very short specialized branchlets. Three buds together at each leaf scar are a characteristic arrangement in these plants, the central bud, as a rule, bearing flowers only. It should be noticed that the buds tend to be less or possibly single in the regions of the twig which bears no flowers. Considering that all buds are specialized either to flower growth or shoot growth the very moment they appear, it proves possible to determine their content by appropriate dissection even long months before flowering time.

Certain cherries (sections phyllomahaleb, padus and laurocerasus: Prunus maximowiczi, Prunus serotina, Prunus laurocerasus, for in-

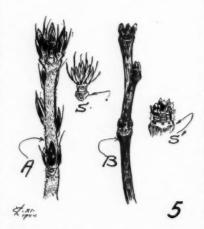


Figure 5.—Ornamental plums: Prunus tomentosa in A; Prunus triloba in B; much-reduced shoots carrying many flower buds on older wood in S and S¹.

stance) bear flowers in a comparatively loose and well developed sort of branchlets (figure 8, A) rather than in the short, tufted clusters characteristic of species like the Japanese flowering cherries. A superficial observer may dismiss this character as having no importance for winter identification, because the plants of the subfamily prunoideae—cherries, plums and the like—ripen their fruits rather quickly and lose them just as quickly. The truth is, on the contrary, that this arrangement is vastly impor-

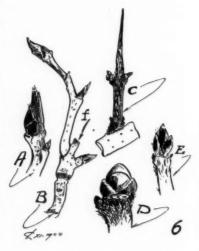


Figure 6.—Apical bud of pear (Pyrus ussuriensis) in A; a spur of the same in B, the place originally occupied by the cluster of flowers in f; a thorny spur of Pyrus pashia in C; apical bud of hawthorn (Crataegus levallei) in D; apical bud of apple (Malus sublobata) in E.

tant at all times, because it connects the cherries, and therefore the plums, with the spiraeas and all their allies. Nothing is indeed easier than to pass from a flowering branchlet of Prunus maximowiczi, for instance (figure 8, A) to the "bridal veil" arrangement of Spiraea vanhouttei (figure 8, B), for the latter is merely a miniature reproduction of the former. Nor is this all; quite as easily may one pass to the stiffly erect, brushlike floral arrangement of Spiraea billardi, Spiraea salicifolia and the like (figure 8, C), for the differences are not of primary order. This large, stiff "brush" is hardly better than an oversize flower cluster of the "bridal veil" spiraeas (compare p in figure 8, A, B, C). If we take into account that all the inflorescences of spiraeas fall within the patterns here shown, that the fruits on them tend to last into the winter, that physocarpus, neillia, potentilla, stephanandra and their immediate relatives are in this

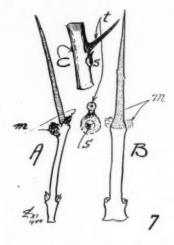


Figure 7.—Thorny branchlet of Japanese quince (chaenomeles) in A, the buds in m; thorn of hawthorn in B, with the presumed abortive buds below the true spine in dotted outline and lettering; section of twig of prinsepia in C, with the thorn in t; the shield covering the bud in S.

vicinity, we must readily agree that anything likely to rationalize our understanding of the inflorescences of all these plants is not only botanically valuable, but also useful for winter identification, because, even if it is not absolutely clean-cut, it brings under a common denominator all sorts of loose figuring. Farther still, from the "brush" pattern of certain spiraeas (figure 8, C) nothing is easier than to go on toward all manners of rosaceous plants of weedy habit or perennial from the rootstock only—witness sorbaria. By comparing figure 8, C with figure 9, it will

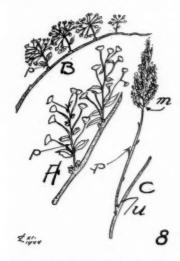


Figure 8.—Arrangement (part) of flower clusters in Prunus maximowiczi in A; same in Spiraea vanhouttei in B; same in Spiraea salicifolia in C. The cluster p corresponds in A, B and C. See figure 9 for m and u.

readily appear that the main branch, u, which grows in the open in spiraeas as a rule, may become an underground rootstock, sending up at springtime a branch, p, which carries a cluster of flowers, m, and all manner of shoots. Accordingly, we have here at one swoop all the plums, cherries, spiraeas, potentillas, sorbarias, geums and the like.

In the groups I have just mentioned—but always remembering the grain of salt—the plant blossoms at the sides and continues growth at the tip. In another group I am about to mention, the reverse is true, for the plant blossoms at the tip and grows at the sides.

How this works is not hard to see. Let us suppose that in the fall of 1944 we set aside two buds of a plum and two buds of a shadbush (amelanchier), one bud in each set being flower-bearing, the other shootbearing. Beginning with the plum (figure 10, A), we shall have in the spring of 1945 a short cluster of flowers from one bud, a shoot from the other. The cluster of flowers will ripen its fruits in due course, then die out altogether; the shoot will carry a normal complement of flower buds and shoot buds and will repeat the performance in the spring of 1946, lengthening mostly at the tip. In the shadbush, on the contrary (figure 10, B), the flower bud will send up a robust twig ending with flowers; then, almost without a stop, a second twig will come out laterally, the performance being repeated in 1946. Obviously, the shoot bud will send up a branchlet, which will behave as described once again in 1946.

These diagrams are generalizations, which are by no means foolproof, for the "brush" spiraeas may at times act pretty much like the shadbush, and the second twig of the shadbush itself may fail to develop in 1945, re-maining dormant as a bud on the side of the flower-bearing shoot even for a longer time than a year. However, these generalizations have basic value. Lateral growth from flowering spurs is characteristic of apples, pears, service trees, aronias, shadbushes and pyracanthas; it all harks back to the pattern of figure 9, B-witness, for instance, the spurs (figure 6, B; figure 11) of pears and apples-and may be deemed peculiar to the subfamily pomoideae. If it be realized that a flowering spur may not yield from its sides a bud capable of flower bearing the next spring and that no year-old growth may bear flowers immediately, it will readily be understood why apples flower well only in alternate years.



Figure 9.—A perennial from the rootstock (sorbaria) derived from the pattern of Spiraea salicifolia. (See figure 8, C; p, m and u correspond in the two drawings.)

Aside from the "brush" spiraeas, which are worthy of further study and may after all have patterns of branching and flowering of their own, I know at present two exceptions to the manner of growth peculiar of the apple group, which are curious.

One of these exceptions is the Japanese quince (chaenomeles), in which the year's growth (figure 12, A) tends to end in a thorn. Moreover, other thorns in a lateral position develop, some of which bear at their base flower buds. Other flower buds are normally borne above a leaf scar, all these buds (figure 12, B) being reminiscent of those (figure 5, S, S¹) which appear on older wood in the flowering plums. The bearing of

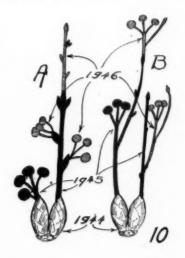


Figure 10.—Pattern of flowering and growing of a plum in A; of a shadbush in B. The year growth indicated; see text for full explanation.

flower buds upon wood of the season is not in line with the pomoideae, to which chaenomeles belongs; it is in line with the prunoideae, or plum



Figure 11.—Fruit-bearing spur and bud of an apple (Malus sublobata).

subfamily, which may yet suggest in-

teresting comparisons.

Another exception is the pretty exochorda; in this plant (figure 13, A-D), the growth takes place absolutely in the spur pattern of the apple group (pomoideae), the fact notwithstanding that the flower identifies exorchorda as a member of the spiraea group (spiraeoideae). It is characteristic under the circumstances that the fruit of exochorda should be the live image of an apple minus its flesh and that the plant itself should convey more than a casual suggestion of the shadbush, which belongs this time without question with the apples. Although the shadbush (figure 13, B) looks in winter nothing like an exochorda on account of its long slender buds reminiscent of the aronias, still it bears its flower and fruits exactly as does exochorda, the difference being that the fruits of the latter long persist, while those of the shadbush are soon lost.

As is well known, a free-grown shoot of hawthorn is mostly armed with robust lateral spines (figure 7, B), which dry more promptly at the tip than at the base, the transition between the thoroughly dried and partly dried ends being as a rule well marked. On suckers, the spines may sometimes be seen to be ringed by a peculiar groove or choking (articulation). There is a suggestion here that the spine of a hawthorn (figure 7, B) is tantamount to a full branchlet of the Japanese quince (figure 7, A) the uppermost buds of which have been radically eliminated, the flower-bearing ones most particularly. In brief, while the hawthorns suggest

chaenomeles, they refuse, like all selfrespecting apples, to carry flowers upon unseasoned wood. The sketch I submit is perhaps incomplete, but the problem it outlines for the attention of pomologists is not without its theoretical and practical interest. There may be more here than hits a casual eye.

In conclusion, colossal as is the rose family, it revolves, as most botanical families do, around a very few ballbearings. The reader may readily understand that all the patterns and arrangements I have brought forward in this and the preceding article have definite relation to winter identification, which is here my primary subject. They nevertheless also involve broad issues which it is not now the time to discuss in detail.

In a coming article I shall end our study of the rose family in winter. The reader will please take notice that while figures 4, 5, 6, 7 C, 11, 12 and 13 are drawn from life and intend to be as accurate as I can make them, the others are meant to carry a point and are largely diagrammatic.

ENOUGH CHRISTMAS TREES.

The supply of Christmas trees will probably be ample to satisfy holiday needs in the United States, reports the Office of War Information on the basis of data supplied by the War Production Board, the Department of Agriculture and the Office of Defense Transportation.

The normal number of Christmas trees used throughout the nation for the holiday period is between 10,000,000 and 15,000,000. About half come from the Pacific northwest, chiefly Montana, Idaho, Washington and

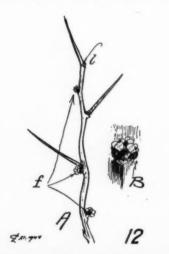


Figure 12.—Japanese quince (chaenomeles): The year growth in A, the flower buds in f, a shoot bud in I; details of flower bud in B.

Oregon. The lake states, the New England states and Canada account for most of the remainder.

Prospects for 1944 deliveries are as follows: Montana is expected to produce about the same as in 1943, or more than 3,000,000 trees. California,

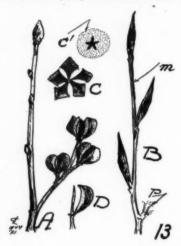


Figure 13.—Exochorda: Fruiting twig with lateral branchlet in A; fruit seen from above after opening in C; a lone section of the fruit (carpel) in D, still in place by the stiff woody core of the fruit; how an opened fruit of exochorda would look with pulp around, in C¹. Shadbush (amelanchier) in B; the original position of the fruits in p, the branchlet, m, corresponding to the nonfruiting branch of exochorda.

Washington and Oregon expect a slight reduction. Minnesota expects to produce about 2,500,000 trees. The lake states as a whole will produce their usual number. New England production will be substantially the same as in 1943. Pennsylvania expects a slight reduction. New York will probably drop to one-half the 1943 output. Canada's 1943 shipment of 5,000,000 trees, which is the approximate number shipped to the United States for each of the past five years, will probably be maintained in 1944

VICTOR HEURLIN, of Blue Hill Nurseries, Inc., South Braintree, Mass., left November 27 for an extended visit to Florida. His son accompanied him, but will return after a brief tour.

THE army navy "E" production award was presented to the men and women of the Swain Nelson Co., Glenview, Ill., for outstanding production of war materials, November 20. The ceremony was held at the Michigan Shores Club, Wilmette. Some account of the war work of this old nursery firm appeared in the preceding issue.

Our Industry After the War

By Richard P. White

No industry can escape the effects of nation-wide or even world-wide economic, social and political trends. Even though an industry or an individual unit of an industry may feel itself smug and unaffected by changes in the whirl of society, they are definitely affected by them, and their mere smugness may be the prelude to disastrous consequences. As I have stated in various meetings of nurserymen over the past five or six months, now is the time to do some serious thinking.

In general, our employees are not covered by the provisions of the wage-hour law, although some of them are. But does anyone believe for a moment that our wage scales are not now affected, and will not be affected in the future, by the general wage levels of industry? Hearings are currently being held in Congress on a bill which declares that wages below 65 cents per hour are substandard. If this should become an accepted floor under wages for industry, do you believe we as an agricultural industry could compete for adequate and trained personnel at 40 cents per hour?

Labor is striving with all its power to establish an annual wage system. so that a worker may be assured of his pay checks, sickness, vacations, layoffs, etc., notwithstanding. Failing in this, labor will compromise on a guaranteed monthly wage or a weekly wage. The reason is obvious. According to the most recent data, developed by the War Labor Board, hourly wages have increased some forty-three per cent and the home pay some sixty-odd per cent since 1941, with the cost of living rising during the same period a little less than thirty per cent. Labor wishes to maintain this advantage, for which you cannot criticize it. With the reduction of overtime hours, take home pay will be diminished, and labor does not care to have its income reduced. The wage-hour law sets 40 cents as a minimum hourly wage. The Pepper pro-posal calls a rate below 65 cents substandard. Labor desires its take-home pay be maintained even though overtime hours at time-and-a-half pay be eliminated. The Little Steel formula of fifteen per cent allowable increase

in pay over 1941 rates has already been badly bent in a number of wage disputes and will be considerably more bent as time goes on.

Our industry is not highly mechanized, and by its very nature we shall continue to depend upon hand labor to perform most of our production and handling. We shall need trained labor, in some cases skilled labor, to perform our operations successfully and economically. We shall have to compete for this labor on a higher wage scale than prewar, and we might as well face that fact now and prepare for it.

Cheap, inexperienced and untrained help is expensive help. It produces uneconomically. Its production is unsatisfactory. Granted we shall continue to be willing to pay an adequate wage to our employees, an added investment in training these employees is going to be a good investment. I have recently been apprised of a contemplated employeetraining program sponsored by one of our active and successful state associations, which has, to me, the probability of fulfilling a need now and particularly in the years immediately following the war. I believe every state association can well afford to look into the possibilities of such an employee-training program for the benefit of its members.

The nursery concern is by and large a family affair. Some follow their fathers. This is not to be criti-cized. It is a healthy state of affairs. The danger involved is that the sons of other fathers find it difficult to rise in the firm on their merits of achievement and loyalty to positions of minor administrative or executive capacity with a wage or salary commensurate with their ability. True, in the average nursery concern, there are not many such jobs. In the larger concern, there may be several. It seems to me that the sooner we can establish in such concerns a system of job classifications with definite pay scales and create an opportunity for our employees to forge ahead from one classification to another as need and ability permit, the sooner will the nursery industry be blessed with more young blood ambitious to succeed for his employer, rather than ambitious to learn enough about the business to enable him to start one for himself.

Stability of employment is impor-

tant to both the employee and the employer. This will be particularly true if we can find ways and means to train our postwar personnel to be more efficient and effective operators. Factors such as a weekly wage rain or shine, incentive wage schemes, group insurance, sick benefits, free medical attention, better working conditions and facilities, particularly for woman employees, who are here to stay for certain jobs, all contribute to a stable, satisfied, efficient labor force.

Social security benefits for our employees fall into the same category. The expansion of coverage in 1945 to include agricultural workers, as well as industrial and commercial, is questionable, although both political parties have embraced the principal of extension. Our own members expressed themselves three to two as opposed to extension of coverage of their agricultural workers. I raise the question, however: "Why are not all wage earners, in whatever field of labor they may be engaged, entitled to the same consideration in their old age under our social security system? It is my belief that many of our agricultural workers would be better satisfied with their jobs if they knew they were to be treated the same under the old age benefit system as their relatives and friends who are working "in employment."

Increased wage scales, increased costs of supplies, increased pay roll taxes, which will come eventually if not in 1945, can only be maintained in competition with other industries if we can continue to show a profit. Profit depends upon an economic and wise business management and the existence of a market. Given these a concern can use black ink.

I have several times expressed my optimism about our postwar markets. I express some concern about business management. For the past few years the nursery industry has been in a favored position. It has had its difficulties, to be sure, but we have been selling low cost inventory at prices uncontrolled by ceilings, and certain segments of the industry have been able, through tact, to pick the orders with the greatest profit potential. The law of supply and demand, limited only by the shortage of labor, has controlled. Such conditions will not always exist.

With labor again available, with [Continued on page 30.]

Summary of talks by R. P. White, executive secretary of the American Association of Nurserymen, Washington, D. C., at the meetings of Minnesota and Wisconsin nurserymen early this month.

Minnesota Opens Winter Meeting

By George W. Nelson

Minnesota nurserymen held their annual meeting December 4 and 5 at the Radisson hotel, Minneapolis. About a dozen nurserymen from the adjoining states of South Dakota, North Dakota, Iowa and Wisconsin were in attendance.

The meeting was opened at 10 a.m. December 4, by Frank Seifert, president. The reports of the treasurer, Harold Reid, and secretary, R. N. Ruedlinger, showed the association to be in good financial condi-

R. A. Trovatten, Minnesota commissioner of agriculture, in an able address, explained the state's attitude toward the industry and plans for service to nurserymen. He pointed out that the nursery inspection laws of Minnesota are based only on biological factors and that restriction on any other basis was not defensible. Although not strictly within his jurisdiction, truck regulations and others which hamper nurserymen and farmers are always a concern of his office.

The state entomologist's office, which is in the department of agriculture, is concerned right now with one newly introduced pest, the European corn borer, and with the Japanese beetle, which, no doubt, will have invaded the state within the next few years. The duties of the entomologist are concerned with other pests which are of grave concern to the nurserymen.

Mr. Trovatten called attention to the agricultural parity law which was enacted by Congress and which provides protection to the growers of about ten of our most important ag-

Paul H. Peters.

ricultural commodities. He felt that this should be an assurance to the nurserymen that no sudden farm slump would occur after the war.

He thanked the nurserymen for their splendid cooperation with T. L. Aamodt, the state entomologist, who, he pointed out, has practically grown up with them. He explained that the increased duties of nursery agents' registration, European corn borer control, termite control, etc., had added to his former duties without any increase in appropriations.

any increase in appropriations.

Mrs. Verle E. Nicholson, president of the Minnesota State Horticultural Society, explained its aims. asked the nurserymen for their support in making Minnesota a more beautiful place in which to live and called their attention to the fact that the local groups of the society are important in building a finer outdoors in the future. She advised that the society would support a memorial highway project and would support projects for living memorials to the servicemen of this war, such as community forests and parks. Mrs. Nicholson showed herself to be quite familiar with the aims and problems of

the nursery industry.

E. S. Welch, president of the Mount Arbor Nurseries, Shenandoah, Ia., was called on for remarks on the shortage of certain classes of nursery stock, such as plums and roses. It was pointed out that plum seeds were almost unobtainable and that the labor for making rose grafts and growing seedlings was not obtainable. In addition, the wet weather during the spring and early summer prevented good growth of what had been lined out.

The program of the afternoon session had been arranged by the staff of the University of Minnesota, T. L. Aamodt presided.

Dr. C. E. Mickel, who became head of the entomology division at the Minnesota agricultural college during the past year, addressed the members. Dr. Mickel was an inspector of nurseries in Nebraska before World War I. He emphasized the danger of introducing foreign pests and plant diseases into the country during our war operations and the need for being prepared to eradicate them. He also spoke of the cooperation between his division and the state entomologist's office. The state entomologist has office headquarters adjoining the offices of his division at University

Farm. The help of University Farm entomologists is always available.

T. L. Aamodt, state entomologist, discussed the nursery inspection laws. He specifically mentioned the agents' registration law and the law relating to landscape dealers, explaining that when these laws were enacted no funds were provided for their enforcement. Nevertheless, considerable time has been spent on this phase of the work. A contemplated change in the certificates of landscape gardeners and agents is to provide that the certificate read so that there is no question whether it applies to stock or to the qualifications of the owner of the certificate to act as a landscape man. Mr. Aamodt outlined further changes in state quarantine and restrictive laws for which the regional and national plant boards are asking.

E. M. Hunt, who was appointed secretary of the Minnesota State Horticultural Society about three months ago, told about the merits of the society's magazine as an advertising medium. The society dues are 50 cents per member from each of the affiliated societies, for which that member receives nine to eleven numbers of the magazine in a year. Mr. Hunt was raised on a farm devoted to vegetable, fruit and flower production; graduated from Minnesota agricultural college, specializing in horticul-ture; worked at the Minnesota fruit breeding farm, and was a manager of the soil conservation nursery in southeastern Minnesota for several years. Before becoming secretary he was the state extension horticulturist for six



R. N. Ruedlinger.

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2000 Cedrus Beodara
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2000 Juniperus Hibernica Fastigiata,
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2000 Juniperus Hill Dundee, grafts
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2000 Taxus Cuspidata, tr., 6 to 10 ins.
2000 Taxus Scapitata, tr., 6 to 10 ins.
2000 Taxus Scapitata, tr., 6 to 10 ins.
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5000 Berberis Thunbergi, S., 9 to 12 ins.
5000 Berberis Thunbergi Atropurpurea,
S., 6 to 9 ins.
5000 Berberis Thunbergi Atropurpurea,
S., 2 to 12 ins.
5000 Berberis Thunbergi Atropurpurea,
S., 12 to 16 ins.

S., 9 to 12 ins.

5000 Berberis Thunbergi Atropurpurea,
S., 12 to 15 ins.

1000 Buddleia Charming
1000 Buddleia Charming
1000 Cydonia Japonica, S., 12 to 18 ins.
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Elacagnus Angustifolia, S., 18 to 24 ins.
5000 Hydrangea A. G., 6 to 12 ins.
5000 Hydrangea A. G., 5 to 12 ins.
5000 Hydrangea A. G., 9 to 12 ins.
5000 Hydrangea P. G., 9 to 12 ins.
1000 Lonicera Maacili
1000 Lonicera Macili, Red
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5 Cytious Scoparius
20 Cersis Chinensis
100 Corylus Avellana
20 Cornus Paniculata
100 Castanea Mollissima
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16 Domestic Apple
16 Domestic Apple
16 Domestic Pear
25 Elacagnus Angustifolia
100 English Walnuts
20 French Crab Apple
100 Ginkgo Biloba
100 Jugians Cordiformis
(Japan Walnuts)
50 Kentucky Coffee Tree
10 Kudzu Vine, Pueraria Thunbergiana
11 Laburnum Vulgare
20 Laurocerasus Caroliniana
10 Morus Alba Tatarica, Russian
Mulberry
5 Mahonia Aquifollum
100 Prunus Manleb
10 Prunus Usaur

20 Laurocerasus Caroliniana
10 Morus Alba Tatarica, Russian
Mulberry
5 Mahonia Aquifolium
100 Prunus Americana
50 Prunus Manheb
10 Prunus Ussuriensis
10 Pyrus Scrotina
2000 Quercus Palustris, Pin Oak
2000 Quercus Coccinea, Scarlet Oak
2000 Quercus Gubra, Red Oak
10 Rosa Wichuraiana
10 Rosa Setigera
15 Rosa Rubliginosa
10 Rosa Rubliginosa
10 Rosa Rugosa
20 Rhodotypos Kerrioldes
10 Rhus Cotinus
5 Rhubarb (Each Variety Available)
3 Syringa Vulgaris
3 Syringa Vulgaris Alba
2 Syringa Josikaca
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20 Wistaria Sinensis, Chinese White
10 Wistaria Frutescens, American
Wistaria

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Ted Weir, pinch-hitting for Prof. W. H. Alderman, who was ill, discussed fruit varieties now being tested at the university fruit breeding farm.

He stated that apple No. 714, an early apple of Duchess season but of far better quality, still continues to show promise. No. 240 crab apple also looked good, being highly col-ored and of the season of Whitney except that it keeps much longer.

Apple No. 978, of the Wealthy season and an apple that colors well, hangs much better to the tree, has a longer season and is an annual bearer, also looks promising, he said. Apple No. 638, a late apple, good in ordinary storage until February, does not cluster, hangs well, bears annually and is uniform in size. It is continuing to live up to the good things noted about it in previous

years. Nanking cherries No. 63 and 64 are self-fertile and look promising. Some samples of Fireside, Victory No. 638, Haralson and No. 978 apples were displayed and tested by the nurserymen.

The election of officers for the coming year resulted in unanimous approval of the following: Paul Peters, Peters Evergreen Nursery, Sherburne; vice-president, Robert Wedge, Wedge Nursery, Albert Lea; secretary, R. S. Ruedlinger, Ruedlinger Nursery, St. Louis Park; treasurer, Harold Reid, Holm & Olson, Inc., St. Paul; trustees, Kenneth Law, Jewell Nursery, Lake City, and Leslie Mitchell, Mitchell Nursery, Owa-

The morning session of December 6 was given over to a business meeting of the association. It seems that pressing problems affecting the nurs-

ery industry are not so many nor so great. Probably the better demand for stock has something to do with it. The labor situation and shortages of certain plant materials were the most general topics of discussion. Some orders were taken, but in general available stock had been sold previously.

Richard P. White, secretary of the American Association of Nurserymen, addressed the meeting. He outlined the benefits to nurserymen of the victory garden program of the Department of Agriculture. From the growing of vegetables to the growing of flowers and then to planting of shrubs, the program had carried the public, and the demand had greatly improved. Mr. White was optimistic about prospects for the industry. He advised the nurserymen not to depend on, or hope for, low-

Save Money

USE THE NEW ULLYETTE TREE DIGGER

Developed by 2 veteran nurserymen at Dansville. Now in use by several large nurseries.

Does good work where any other digger can be used. Easily attached to a Farmall M tractor. Requires only driver and helper to operate. Digs trees up to 3 and 4 yrs. old and 10 to 12 ft. tall.

Everything complete with instructions for attaching to your tractor, \$350, freight paid. Price includes 2 digger blades 8 ins. wide, 24 ins. deep and 24 ins. across. Only 20 diggers available now. A deposit of \$100 will reserve an outfit for you.

Photographs and more complete details on request.

KELLY BROS. NURSERIES, INC.

Dansville, N. Y.

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ered labor rates. Other comments on this phase of his talke are summarized on another page of this issue. Mr. White stated that there is a strong movement on foot to repeal federal quarantine 37, the purpose being to allow importation of foreign plant material at lower cost. The danger of bringing in dangerous diseases and insect pests should not be over-looked, and a fight should be made to protect the industry and all agriculture, he declared.

The distribution of a booklet prepared by the national association, on living memorials to our soldier dead, was explained. The Minnesota association unanimously voted to dis-tribute copies of the booklet.

Dr. O. B. Jessness, chief of the economics division at University Farm, addressed the nurserymen in the afternoon on "War and the Farm Situation." He stated that he hoped that foreign trade would remain in private hands and that our government was working toward this end. He declared that there would be some effort to retain some controls for a time after the war. He advised nurserymen to plan ahead by shifting production to peacetime wants. He stated that, with a reduced personnel made up of persons below the age of 16 and aged persons and women,

SHADE TREES – SHRUBS – EVERGREENS

(Prices quoted are per 100)

(Prices quoted are per 100)

CERCIS CANADENSIS: 6 to 8 ft., \$100.00; 8 to 10 ft., \$125.00.

CHINESE ELM: 1½ to 1½-in., \$115.00; 1½ to 1½-in., \$140.00; 1½ to 2-in., \$170.00; 2 to 2½-in., \$215.00; 2½ to 3-in., \$240.00.

WEET GUM: 6 to 8 ft., \$150.00; 1½ to 1½-in., \$200.00; 1½ to 1½-in., \$250.00; 1½ to 2-in., \$300.00; 2 to 2½-in., \$350.00.

MERICAN ASH: 8 to 10 ft., \$115.00; 10 to 12 ft., \$140.00; 1½ to 2-in., \$190.00; 2 to 2½-in., \$240.00.

SCARLET MAPLE: 10 to 12 ft., \$100.00; 1½ to 2-in., \$130.00; 2 to 2½-in., \$170.00.

SCARLET OAK: 1½ to 1½-in., \$275.00; 1½ to 1½-in., \$350.00; 1½ to 2-in., \$450.00; 2 to 2½-in., \$150.00; 2 to 2½-in., \$170.00.

CORNUS STOLONIFERA: 3 to 4 ft., \$25.00; 4 to 5 ft., \$35.00.

LONICERA TATARIAN: 4 to 5 ft., \$35.00.

GLOBE A RBORVITAE: 18 to 24 ins., \$125.00.

MUGHO PINE: 18 to 18 ins., \$175.00; 18 to 24 ins., \$200.00.

FRUIT TREES

We are still booking orders for Apple and Pear grafts on Oregon-grown seedlings. Have apple and pear scions in leading varieties. A few June Bud Peach and 1-yr. Apple in leading varieties to offer.

See our representatives, Mr. Graves and Mr. Givens, at the convention in Chicago.

EGYPTIAN NURSERY & LANDSCAPE CO., Leo II. Graves, Owner, Farina, IL

farm production had been increased thirty to forty per cent over prewar levels. A series of favorable years from a weather standpoint had also been responsible for a part of the surplus.

The future of DDT and other new insecticides was to have been discussed by Dr. A. A. Granovsky, professor of entomology at University Farm, but the train on which he was coming from a conference at Chicago was delayed and he did not arrive. Mr. White presented a great deal of interesting information on supplies of this product, its effect and when it might be available.

The executive board of the association met after the close of the regular meeting and decided to have next year's meeting at St. Paul. No hotel for the meeting was chosen at that time.

SOUTHWESTERN NEWS.

Rex Howell has gone into the nursery and florists' business at Munday, Tex.

Ross Wolfe, of Wolfe's Nursery, Stephenville, Tex., has spent considerable time recently in the hospital. He had hoped to attend the Western association convention at Kansas City

LANDSCAPE CONTRACTORS!



We have several thousand HIGHBUSH CRANBERRY (Viburnum opulus) five to seven feet. These are young plants, only four years in the field, but have made exceptional growth. The farm on which they are growing is being cleared and we must sell these shrubs, together with other varieties.

Good landscape shrubs are scarce; here's your chance to stock up. If you have a large job which calls for hedges or screens, contact us!

Shipment by car would be the most economical way; we can also arrange delivery by truck.

I. E. ILGENFRITZ' SONS CO.

Monroe, Michigan

in January, but since his health will not permit, he will send a representative.

Lt. Rolland L. Steele, formerly wholesale representative of the Willis Nursery Co., Ottawa, Kan., is a veteran of widespread battle fronts, having fought from Attu in the Aleutians to Leyte in the Philippines.

Bill Welch, son of H. S. Welch, vice-president of Mount Arbor Nurseries, Shenandoah, Ia., spent Thanksgiving at home. Since an old football injury kept Bill from every branch of the service in which he has tried to enlist, he has entered Northwestern University, at Evanston, Ill., as a freshman.

Homer Welch, of the J. C. Welch Nursery, Shenandoah, Ia., is undergoing treatment in a hospital at Omaha, Neb.

The Wichita Valley Nursery, recently established at Munday, Tex., also has a retail flower shop. G. S. Dowell is the manager.

The Henry Field Seed & Nursery Co., Shenandoah, Ia., is building a large, 2-story concrete block addition to the storage house.

Darrell Holmes, of the Shenandoah Nurseries, Shenandoah, Ia., made a business trip to Alabama the latter part of November.

CHRISTMAS. 1944

At this, another Christmas season in a warring world, may our faith remain unshaken that "the Wrong will fail, the Right prevail" and may the Christian hope soon be realized of peace on earth, good will to men.

THE WILLIS NURSERY CO.

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EVERGREENS

Complete assortment of all worth-while **Pyramidal** and **Spreading Evergreens.**

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MILWAUKEE, WISCONSIN

Nurseries at Brown Deer.

Wisconsin Early Meeting Success

Advancing its date nearly two months, the Wisconsin Nurserymen's Association held its annual meeting December 6 and 7, at the Hotel Schroeder, Milwaukee. Thirty-five out of the nearly fifty active members attended, and the change of time was so satisfactory that it was voted to meet on the same days next year—Wednesday and Thursday of the first week of December.

Incumbent officers were reelected: President H. W. Riggert, of Coe, Converse & Edwards Co., Fort Atkinson; Vice-president Ed Eschrich, Wayside Nursery, Milwaukee; Secretary-treasurer Thomas S. Pinney, Evergreen Nursery, Sturgeon Bay. Two new directors were elected for a 3-year term, Herbert Trautman, Sturtevant, and Roland Behle, Rolling Prairie.

Opening the meeting, President Riggert commented on the difficult conditions of the past year, but expressed thankfulness for the favorable fall weather, which extended the delivery period several weeks and thoroughly ripened stock going into storage. He anticipated a strong demand in spring, for ornamentals as well as fruits. The tendency for home builders to seek the open spaces, locating on larger lots, would increase the quantities of stock required. Home surroundings would have more attention, and the service of nurserymen in adding to public health and joy of living lent pride in their calling, he said.

Secretary treasurer Pinney reported a comfortable financial position, with \$411 on hand, so that the recommendation to buy another \$100 war bond was easily adopted.



H. W. Riggert.

Speaking on "Recent Trends in Nursery Stock Certification," E. L. Chambers, state entomologist, pointed out that the casual once-over given nurseries in the horseback days had given way to inspection by specialists, who have to be trained to know a wider range of virus and other diseases and insect injuries as nurseries and the species of plants grown in them increase in number. Inspection must be made at different seasons, for effects of various insects and diseases show at different times. Beyond inspecting and certifying nursery stock, the state of Wisconsin today carries a program of education to the public, so that it will demand an inspection tag on every purchase of stock. More than that, the state provides educational tags to nurserymen to tie on some types of stock; one tag tells the public how to spray small fruits and apples, another how to spray gooseberries and currants and a third how to control red spider on evergreens.

Now there is a proposal, at nurserymen's request, to provide a training program for their foremen, on soils, propagation, weed control, etc., in the form of a demonstration or clinic, perhaps at the summer meeting of the association.

The luncheon speaker was Leigh Hunt, president of the Wisconsin chapter of the American Institute of Architects and chairman of the Milwaukee Housing Authority. He dwelt on the importance of rebuilding blighted areas in the city of Milwaukee and told of definite plans of the housing agency with respect to the sixth ward.

Opening the afternoon session, Dr. A. J. Riker, of the University of Wisconsin, spoke on "Recent Developments in Disease-resistant Varieties." Explaining the methods of developing resistant varieties, he showed colored slides of a Juniperus virginiana resistant to blight, a poplar resistant to canker and a white pine resistant to blister rust. The possibilities of this work are only beginning to unfold.

Richard P. White, A. A. N. executive secretary, offered "A Look to the Future," as summarized on a preceding page in this issue. He added a warning note about a possible relaxation of quarantine 37 after the war and the admission of greater quantities of plant imports.

At the banquet in the evening was heard a speaker of unusual fluency, Brig. Gen. R. F. Farrand, commandant of St. John's Military Academy, Delafield, Wis., and chairman of the Wisconsin Roadside Development Council. In the latter capacity he dwelt on the manifold possibilities of roadside beautification, which must be undertaken as a long-term program to achieve the desired goal. He described the highways of France, centuries old, that illustrated his theme. Then he linked the conservation of game with the conservation of forests, an important part of Wisconsin's highway program.

"Some Problems to Think About" were put to the nurserymen by Prof. J. G. Moore, long head of the department of horticulture at the University of Wisconsin. He touched provocatively on such diverse topics as obtaining greater uniformity in plants now commonly propagated from seeds, merits of dwarf apples on Malling stocks for Wisconsin planting, care in introduction of new varieties of plants and weeding present varietal lists, replacement of stock as an industry problem, and planting plans as a means of pleasing customers or of moving surplus stock or larger quantities of stock. He discussed phases of the last-named topic, intricate because of difference of designers' tastes and customers' wishes, plus the commercial aspects. He left the audience the sound conclusion that the satisfied customer who came back was worth many times the onetime buyer who was oversold or uncharitably treated.

Costs on planting jobs were given timely attention in the paper presented from his experience by Charles Hawks, Jr., of Hawks Nursery, Wauwatosa, Wis., which will be published in full in a subsequest issue.



Thomas S. Pinney.

EVERGREENS—In a large assortment of Thuja, Juniperus, Chamaecyparis and Taxus.

LARGE SIZES—Cryptomeria, Arborvitae, Pine and Moss Cypress.

SHADE TREES—Linden, Norway Maples, Oriental Planes, Oak and Ginkgo.

ORNAMENTAL—Flowering Cherries, Crab Apple and Beeches, named varieties,

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and EVERGREEN SHRUBS,
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Juniper and Spruce grafts
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The remarks of his associate, A. C. Hanson, from his sales experience bear attention; sales costs were variable, he said, being a heavy percentage in dull periods, but only a slight fraction in a sellers' market like today, when all the business one can do is readily booked over the tele-

Another presentation of local talent on the program was likewise informative and to the point. L. G. Holmes, vice-president of Coe, Converse & Edwards Co., Fort Atkinson, under the topic, "Fads and Fashions in Planting," discussed the importance of intelligent application of landscape design even in small home plantings. Use of the same plan, time and again, on architecturally different types of houses, is responsible for many mistakes and unsatisfactory developments. Like the ladies' fashions in wearing apparel, plantings of homes in a locality should be different, each suited to its own application. Nurserymen must give thought to this principle to be successful in the postwar era, when many small homes will be planted and when the owners will be more critical because of the increasing public education in gardening. With colored slides, Mr. Holmes showed typical home plantings, as well as suitable plants for midwestern surroundings.

During the business session, the association voted to participate in the state fair next August and authorized the president to appoint a committee to consider design and materials for a group exhibit, the cost of installation to be provided by the fair management. The committee consists of E. H. Niles, chairman; T. A. Singer, and Charles Hawks, Jr.

The association voted to join the Wisconsin Roadside Development Council and also to purchase copies of the A. A. N. booklet on "Living Memorials" and distribute them to civic groups and other appropriate bodies in the state.

The summer meeting, foregone the past two years, will be held in 1945 if conditions permit, the members voted. If transportation is then obtainable, the invitation to inspect the plantings of the Nekoosa-Edwards Paper Co., Port Edwards, Wis., will be accepted. Failing that, the meeting will be held at the Wayside Nursery, Milwaukee, on invitation of the proprietor, Vice-president Ed Eschrich.

Since many years have passed since the A. A. N. last met in Milwaukee, the association authorized the secretary to invite the national organization to meet there within the next [Concluded on page 19.]

SHADE TREES

ASH, White
1-in. up to 2½-in.
BIRCH, Amer. White
5 to 6 ft. up to 1½-in.
ELM. American
6 to 8 ft. up to 3-in.
ELM, Chinese
5 to 6 ft. up to 1½-in.
HACKBERRY
1-in. up to 2½-in.
HONEY LOCUST
6 to 8 ft. up to 1½-in.
LINDEN, American
5 to 6 ft. up to 1½-in.
MOUNTAIN ASH, European
4 to 5 ft. up to 1½-in.

Above varieties available in quantity.

Write for quotations, stating sizes and quantities desired.

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Coming Events

MIDWINTER CALENDAR.

January 3 to 5, 1945, Western Association of Nurserymen, Hotel Muehlebach, Kansas City, Mo.

January 3, Kansas Nurserymen's Association, Hotel Muehlebach, Kansas City,

January 3, Missouri Nurserymen's Association, Hotel Muchlebach, Kansas City.

January 4 and 5, Indiana Association of Nurserymen, Purdue University, Lafayette.

January 5, Oklahoma Nurserymen's Association, Hotel Huckins, Oklahoma City.

January 6 to 8, executive committee meeting, American Association of Nurserymen, Hotel La Salle, Chicago.

January 9 to 11, Illinois State Nurserymen's Association, Hotel LaSalle, Chicago.

January 10, Maryland Nurserymen's Association, Emerson hotel, Baltimore.

January 12 and 13, Iowa Nurserymen's Association.

January 12 and 13, New York State Nurserymen's Association, Rochester.

January 15 to 17, short course for nurserymen, landscape gardeners and arborists, Ohio State University, Columbus.

January 16 and 17, North Carolina Association of Nurserymen.

January 18 and 19, Ohio Nurserymen's Association, Hotel Deshler — Wallick, Columbus.

January 23 and 24, Tennessee State Nurserymen's Association, Hotel Hermitage, Nashville.

January 24, Oregon Association of Nurserymen, Heathman hotel, Portland.

January 24, New Jersey Association of Nurserymen, Hotel Stacy-Trent, Trenton.

January 25 and 26, Michigan Association of Nurserymen, Grand Rapids.

January 29 and 30, Kentucky Nurserymen's Association, Kentucky hotel, Louisville.

January 31 to February 2, New England Nurserymen's Association, Hotel Statler, Boston, Mass.

February, West Virginia Nurserymen's Association, Charleston.

OKLAHOMA PROGRAM.

The annual meeting of the Oklahoma Nurserymen's Association will be held Friday, January 5, at the Hotel Huckins, Oklahoma City, announces Leo Conard, secretary.

At the morning session, after the president's address and the introduction of members, J. Frank Sneed, president of the American Association of Nurserymen, will talk on "Cooperation Between the National and State Associations." Richard P. White, executive secretary of the A.A.N., will speak on "National Outlook of the Nursery Business."

The group will adjourn for lunch-

eon at the hotel. Emmett E. Barbee, secretary of the Oklahoma City Retail Merchants' Association, will deliver a business address.

After a short business meeting, beginning at 2 p. m., at which the secretary-treasurer's report will be heard and officers for the coming year will be elected, Glen R. Durrell, of the division of forestry and state parks, will tell of "The Governor's Treeplanting Program." Dr. Frank Cross, of Oklahoma A. & M. College, will speak on "Recommended Varieties of Fruit Trees for Oklahoma," and C. E. Garee, Noble, Okla., on "Ornamentals for the Future."

NEW ENGLAND DATES.

Since the announcement in the preceding issue, a shift has been made in the dates of the meeting of the New England Nurserymen's Association in order to secure better arrangements at the Hotel Statler, Boston, states Louis Vanderbrook, secretary.

The dates are now definitely set for January 31 and February 1 and 2. The middle day will carry an educational program as in preceding years.

KENTUCKY DATES SET.

Plans have been made to hold the winter meeting of the Kentucky Nurserymen's Association at the Kentucky hotel, Louisville, on the afternoon and evening of January 29 and the morning of January 30, announces Howard G. Tilson, secretary.

EXTEND OHIO COURSE.

Because the arborists desired more attention on the program than planned in the 2-day schedule, L. C. Chadwick announces that plans have been revised so as to start the short course for nurserymen, arborists and landscape gardeners at Ohio State University, Columbus, on the afternoon of January 15 and run through January 16 and 17.

ILLINOIS PROGRAM.

The first session of the Illinois State Nurserymen's Association meeting, January 9 to 11, at the Hotel La-Salle, Chicago, will be held at 1:30 p. m. and will be given over to the regional meeting of the American Association of Nurserymen. After calling the meeting to order, Presi-

dent Arthur E. Schroeder will turn the meeting over to the regional committeeman, Arthur H. Hill. Speakers for the afternoon will be President Schroeder, Mr. Hill, J. Frank Sneed, president of the A. A. N., and Richard P. White, executive secretary of the A. A. N.

At the luncheon meeting, at 12:15 p. m. on the second day, Livingston E. Osborne, director of the Illinois state department of conservation, will speak on "Conservation." Following his talk, Dr. George C. Decker, entomologist of the Illinois Natural History Survey, will speak on "The Nurseryman's Interest in Entomology."

The only morning session, on the third day, will be a business session, at which officers' and committee reports will be heard and new officers will be elected.

A luncheon meeting will follow, at which Anderson Pace, chairman of the Illinois postwar planning commission, will speak on "Postwar Planning in Illinois."

KANSAS CITY SPEAKERS.

Outstanding speakers on postwar phases of the nursery business have been provided for the meeting of the Western Association of Nurserymen at Kansas City, January 3 to 5, by the program committee, consisting of S. R. McLane, Charlie Williams and Lawrence Wilson.

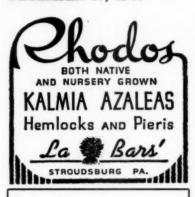
At the meeting of retail nurserymen on the first day an address will be given on "Our Future Business as Related to Building Expansion," by Edward W. Tanner, chief architect for the J. C. Nichols Companies, Kansas City, among the most successful developers of real estate in the country. Mr. Tanner is well qualified to predict what may happen to the home building industry after the war, and this, of course, will have a direct

MEET 'EM ALL!

Whether you attend the trade meetings next month or are obliged to remain at home, you can tell all your customers about your spring offers in the advertising columns of the American Nurseryman.

List your long items or your specialties in a display advertisement (at \$2.50 per column inch) or in a classified advertisement (at 20 cents per line).

Forms for January 1 issue will close December 26.



FRUIT TREES AND SMALL FRUITS

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PLANTS SHRUBS

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PRONOUNCING DICTIONARY of Plant Names

64 pages, 3000 names, 25c per copy American Nurseryman Chicago bearing on the nursery business. The number of homes built will affect the volume of landscape business, and the types of architecture employed will determine the kind of plant materials required.

Those interested in fruits will hear with interest the talk on "How to Win the Fruit Tree Game," by Dr. T. J. Maney, Iowa State College, who has been conducting research on fruit tree stocks for many years.

At the final session, Dr. L. C. Chadwick, Ohio State University, will discuss "Plant Materials for the Postwar Period." This is a subject that vitally affects all nurserymen. Those who can make the best forecast on the kinds of plant materials that will be in greatest demand after the war will profit the most. Those who have read the numerous articles of Dr. Chadwick on plant materials in the American Nurseryman know his practical grasp of this subject.

The American Association of Nurserymen will be represented on the program by a talk by the president, J. Frank Sneed, Oklahoma City, and by the executive secretary, Richard P. White, Washington, D. C. The latter will present the latest developments that affect the nursery industry, in one of those messages that his hearers always find valuable.

Other details of the Kansas City program were reported in the full announcement in the preceding issue.

WISCONSIN MEETING.

[Concluded from page 17.]

few years when the convention should be held in region 4.

At a meeting of the Wisconsin A. A. N. chapter, officers were reelected, as follows: President, Charles Hawks, Jr.; vice-president, Floyd Fancher; secretary-treasurer, Thomas S. Pinney. J. P. Foster continues another year as delegate and Floyd Fancher as alternate.

H. J. Rahmlow, secretary of the Wisconsin State Horticultural Society, received the news December 7 of the death in action of his son-in-law, Lt. William Van Cleaf, with the motorized infantry in France, and had the sad burden of taking the tidings to his daughter at his home at Madison with her year-old baby. Mr. Rahmlow's son, Lt. John Rahmlow, is company commander in the Fifth Rangers battalion in France.

R. BRUMOND SMITH, son of R. Morgan Smith, of the Ernst Nurseries, Muncie, Ind., has been given a medical discharge from the army, after nearly two years of service.

BARGAIN 300,000 TREES

Land sold for park site; must move at sacrifice.

Less than \$100.00, add 20 per cent for packing. \$100.00 to \$500.00, add 10 per cent for packing. Carload lots, no charge for packing.

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| 6 to 8 ft | × | × | | * | | | | | | * | * | \$0.40 |
| 8 to 10 ft | | * | | * | × | * | × | * | * | * | | .60 |
| RED MAPLE | | | | | | | | | | | | |
| 8 to 10 ft | | | | * | | | | | | | * | .60 |
| 10 to 12 ft | | | | | | | | | | | | |

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| 6 | to | 8 | ft., | only | | | | | | | | \$0.25 |
| 8 | to | 10 | ft., | only | | | | | | | | .40 |
| 10 | to | 12 | ft., | only | | | | | | | | .75 |
| | | | | | | | | | | | | 1.00 |

| \$0.50 |
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| .75 |
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Plants for a Garden in Shade

By C. W. Wood

It might be well at this point to examine a few of the plants used felicitously in the shadier parts (quite full shade) of the garden which was mentioned in the December 1 issue of the American Nurseryman. Plants for light or even half shade are quite plentiful, as can be verified by a little searching, but the ones that have adapted themselves to full shade, excepting the few which bloom before the deciduous cover has been spread out by the trees and then remain more or less dormant until the next season rolls around, are not too plentiful. Even so, there is more good material than is apparent from ordinary plantings. The gardener who made the plantings from which these notes have been drawn had searched the world for material to suit his needs and found much more than will find a place here (some of it is not available at present and my plant sense tells me some would have little appeal to ordinary gardeners), but I hope to point out a few of rather broad appeal. Let us then attack them alpha-

I have long observed that Aconitum napellus does better in some shade than it does in sun, but I had never seen it used in quite full shade with such telling effects. Perhaps it would have had more sunlight if the only part of the property with the exact needs of monkshood (a quite heavy soil that never dried out) had not been in the shade of maples. Be that as it may, they were planted there several years before I knew the garden and had never been moved, increasing in size of clumps and beauty from year to year. And thereby, I suspect, hangs a tale-a tale of success on this gardener's part and one of failure when frequent division is followed. In the face of advice to the contrary (I read, for instance, in one of our most quoted authorities that monkshood should be "divided about every three years"), I am convinced by experience and observation that it is a mistake to disturb the plants as long as they are doing well, and that should be for several years, perhaps ten or more. If one followed the advice to divide every three years, he would never know how lovely monkshoods could be, for it takes them that long to get down to the business of producing a bountiful crop of flowers all during July and August. The napellus varieties (dark blue in the type, blue and white in variety bicolor and very dark blue in Spark's variety) were the ones used, because, as the gardener told me, they were the ones that endured shade with the most grace. The last-named especially seemed to do well, reaching a height of five feet or more, instead of the usual four feet.

The accompanying member of this association was the pretty native, snow thoroughwort, Eupatorium urticaefolium, whose snowy heads on 3-foot plants are one of the joys of August and September. It does not need full shade for its well-being, of course, for it grows naturally in open spaces and in quite dry soil, but it was a splendid companion in this association. The finishing touch in the entrancing picture was supplied by rattlesnake plantain, Epipactis pubescens, planted in a generous mass, broad as it left the monkshoods and thoroughworts and tapering off to a narrow ribbon down the hillside. Of the three plants, the last seems to be the least used, though its merits, including a season-long display of rosettes of white-veined green leaves and spikes (fifteen to eighteen inches high) of white flowers in July and August, deserve a better fate. It may be that a misunderstanding of the plant's needs may have had something to do with its absence from gardens. That is probably true, for I find many references in the literature to its miffiness; as a matter of fact, it will endure much abuse from drought and cold so long as it has an acid soil, not necessarily highly acid as for

trailing arbutus and twinflower, but about the same as that given Coreopsis rosea and Aster linariifolius.

One walk through the woodland, running from about half shade to quite dense, was bordered by hundreds of plaintain lilies, and it made a picture long to be remembered. There in rich woodland soil, with an annual top-dressing of barnyard manure, Hemerocallis sieboldi grew close to three feet tall, its metallic blue leaves of very large size making a pleasing ribbon of color in the subdued light. All the kinds, of which there were a half dozen or more, including the pretty variegated-leaved forms of H. caerulea and H. lancifolia. grew robustly under that generous treatment. In front of the plantain lilies, Virginia bluebells, Mertensia virginica, and bloodroot, Sanguinaria canadensis, had been planted in broad masses for spring color, and their passing was covered by lowgrowing ferns, including the common polypody, Christmas, maidenhair and maidenhair spleenwort. In large groups among the plantain lilies, Solomon's-seal, Polygonatum biflorum and great Solomon's-seal, P. commutatum, brought graceful growths to four feet or more in height, graceful foliage and, in the latter, conspicuous blue-black fruits.

Bayous had been dug at various places along the stream bank, just deep enough to be always moist, and there thrived many an entrancing plant which would otherwise be difficult to handle in the garden. For instance, the fringed polygala, Polygala paucifolia, was sure to spread

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Pronouncing Dictionary of Plant Names and Botanical Terms 64 pages, 3000 names, 25e per copy AMERICAN NURSERYMAN 343 S. Dearborn St. Chicago 4, Ill. out a carpet, on one bayou, of its rosypurple butterflies during May and June; on another, in about half shade, the water forget-me-not, Myosotis scorpioides, put on a summer-long exhibit of its lovely blue flowers; on still another, trollius in several forms was the dominating feature. But I think the most attractive of the bayou plantings was made up of the variegated sweet flag, Acorus calamus, and Iris versicolor as the accent plants, with the wild calla, Calla palustris, planted at the water's edge and lizard's-tail, Saururus cernuus, at the back. The latter was also in about half shade.

On on eastward-facing slope, where the trees had been thinned out to make about half shade, were many entrancing pictures. Among the ones that I liked best was a quite large mass of named astilbes. That plant would be called the background of the picture, I suppose, and it was, in numbers at least, the predominating feature. But its June and July celebration was not the only colorful part of the program. Trillium grandiflorum in bold masses preceded it and earlier still came spring beauties, Claytonia virginica. The latter, which grew naturally in the woodland, was encouraged to carpet as much as possible of this particular section, with most pleasing results. Another pleasing feature of the planting was the association of Delphinium tricorne with trilliums, the lavender to blue of the flower showing up especially well among the white trilliums. This native delphinium is not, it appears, so well known as its merits warrant, especially when one is in need of a shade-loving plant of its type. It sends up a simple stem to a height of fifteen inches, more or less, clothed in 5-parted leaves, which in turn are again divided into three to five parts. That alone makes it ornamental, but when it opens up its raceme of lavender to blue, sometimes white, spurred flowers in May, it is one of the woodland's attractive offerings. It comes readily from fall-sown seeds and is easily handled while the cluster of tuberous roots is dormant from midsummer onward.

Another association in the same part of the woodland that made a pleasing picture throughout the open year started out in spring with snowdrops, galanthus, in liberal clumps and wound up in autumn with the Arctic daisy (Chrysanthemum arcticum). The half shade and leafy soil of the situation are ideal for snowdrops in this section, and the same conditions seem to suit the daisy. Shooting stars, mostly the eastern

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Dodecatheon meadia, carried on the theme during May and June, with their clusters of white to rose-pink, cyclamen-like flowers on scapes up to two feet or more in height. As usually seen, shooting stars are not very attractive in their lonesomeness of single to three plants, but here, where they were used in wide (two or three feet) ribbons, they made a favorable impression. Clumps of day lilies, mostly Hemerocallis thunbergi (H. serotina of some), covered July with its offering of rather small yellow lilies. Here also was the loveliest planting of tawny day lilies, H. fulva, that I have ever seen. A naturally moist spot with its accompanying rich soil was chosen for this plant, and there it threw up stems to more than six feet, lighting up its half-shaded home all during July with its orangered flowers. Cimicifuga brought the year to a close in this section.

A most pleasing planting that comes to mind was made up of two polemoniums, P. reptans and P. caeruleum; two primulas, P. polyantha and P. vulgaris, and several thalictrums. Commencing with the primroses in early spring, the pastel shades of the Munstead strain of P. polyantha at one end of the long planting and a wide selection of English primroses at the other made a pleasing picture in their half-shaded nook. This was followed through May by the pale blue Polemonium reptans, which was planted in long drifts in front of the 3-foot P. caeruleum; this in turn lighted up that corner in early summer. Then a procession of meadow rues took up the theme, carrying it into September with a last burst from T. dipterocarpum.

Rightly handled, T. dipterocarpum is one of the loveliest of tall, lateflowering subjects for light to half shade. I am not sure what right conditions are, because it sometimes does poorly here in northern Michigan for no apparent reason, except that it does not like the cold of our hilltop. On a southeast slope in the garden under consideration, where it was shielded from the prevailing winter winds, had a bountiful covering of Nature's best mulching material and a soil rich in leaf mold, there were many specimens that reached up over six feet and spread out a wide canopy of airy lilac-colored flowers with their conspicuous pale yellow stamens. The pretty T. delavayi, with its pretty lilac flowers on 3-foot plants in July and August, was another effective number in this association. Because of lack of hardiness, I suspect, we cannot keep this Chinese thalictrum on our exposed hill; so I cannot say much about it

from experience, except that it is a lovely plant and should be used where hardy. It precedes the popular T. flavum by a week or more, carrying its pretty lilac color well into the season of that pale yellow species.

While on the subject of thalictrums, it might be well to spend a moment on two native species, T. dioicum and T. polygamum (T. cornuti), which were effective members of several associations in light shade. The first of these is not especially attractive in its greenish flowers, though it does add a certain quality to the early spring scene and its 3-foot growths clothed in the daintiest of thalictrum foliage are a summer-long joy. The other, T. polygamum, was an attractive plant in its stately 6-foot stature as used here in lightly shaded situations as a foil for such tall lilies as L. auratum, L. canadense, L. superbum and L. testaceum. I should like to repeat in my own garden some of these thalictrum-lily associations, especially the white of T. polygamum and the orange-scarlet of L. superbum, but despair of ever having a suitable place.

There is not space to dwell long upon the other plants which made up these thalictrum-lily associations, but I should like to mention a few plants that made a favorable impression on this observer. For instance, one planting had been entirely surrounded by the creeping forget-me-not, Omphalodes verna, which gave a halo of heavenly blue flowers on 8-inch stems in April and May. Another was surrounded and interplanted with blue phlox, P. divaricata, and another with the lovely white P. suffruticosa, Miss

Because I have always supposed that Adam's needle, Yucca filamentosa, needed full sun for its wellbeing, I was pleasantly surprised by the bold clumps of the plant which this gardener has assembled in light to half-shaded situations. In that humus-filled soil the plants grew ten feet tall and were then a most impressive sight during July, when they opened out their creamy-white bells. In its well drained home, little springflowering bulbs, including chionodoxas, erythroniums, fritillarias, snowflakes and scillas, had been grouped in generous masses for spring display with the summer hyacinth, Galtonia candicans, for its summer (July and August) offering of white bells on stems three to five feet tall, the latter if generously treated. I do not know how this South African behaves elsewhere in the north, but here, if it is planted five or six inches deep, where snow is deep throughout the winter, it is safely hardy.

AMERICAN PLANE TREE.

The American plane tree, or sycamore, as it is often called, is a large spreading tree with a rounded head and with the characteristic creamywhite bark which exfoliates in rather small plates. It is native over the territory from Maine to Ontario and from Minneapolis south to Florida and Texas. It is sometimes referred to as the largest hardwood tree in North America. It attains its largest size along streams and on rich bottom land. It grows rapidly and at maturity may attain a height of 120 to 150 feet or more. The trunk diameter may run as large as ten to eleven feet. It quite often forks into several large secondary trunks, and the massive spreading limbs form an open head, sometimes running from seventy-five to 100 feet across. The characteristic white scaly bark is typical of older specimens. On young plants the bark is often quite smooth and greenishgray in color.

The leaves are nearly straight across at the base, 3 to 5-lobed and four to eight inches wide. They are often broader than wide. One of the interesting characteristics of the leaf is that the petiole is hollow at the base and fits over the bud.

The one-seeded fruits are borne in solitary heads. Only occasionally do two heads appear, although this fruiting characteristic is typical of the London plane.

The American plane tree prefers a moist fertile soil, but will grow in dry situations. The anthracnose disease, or sycamore blight, is often quite prevalent on the American plane tree. Frequent spring rains favor the development and spread of this disease. Advocated control measures consist of spraying with Bordeaux mixture and raking and burning the leaves in

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the fall. The Bordeaux mixture spray should be applied early in the spring at the time the leaves are about half grown and should be followed by a second, and possibly a third, application at two-week intervals. This disease often results in severe defoliation of the plant and may considerably weaken the tree. Propagation is by seeds and hardwood cuttings.

While the American plane will do well under city conditions, it is not so often planted either as a lawn or street tree as the London plane tree. It is less satisfactory under such conditions than the London plane. Its primary use will be found for off-scape planting along the banks of streams, where its white bark adds an interesting note to the landscape picture. The susceptibility of this species to anthracnose and the messiness of falling leaves are factors preventing its extensive use as a lawn tree.

L. C. C.

NEW TYPE TREE-DIGGER.

A new tree-digger, called by many one of the greatest advances in nursery equipment in recent years, is now being manufactured and offered for sale.

Back in the fall of 1943, Ullyette Bros., Dansville, N. Y., put their idea of some time into operation. With the help of a handy machinist, Edgar W. Allen, the digger was made and attached to a Farmall H tractor. It was discovered that this tractor lacked sufficient power and the Farmall M was found to be the answer.

Ullyette Bros. did all their own digging and that of several other nurseries during the digging season of 1943. Since then they have improved and perfected the digger. Several were in use in Dansville this fall, and most of the stock grown in that area was dug with the new equipment.

The framework is easily and quickly attached to the tractor. One man beside the driver is all the help that is needed. This, compared with the older methods, easily shows the savings possible. The low cost of the digger makes it available to other nurserymen. This new equipment is being offered for sale by Kelly Bros. Nurseries, Inc., Dansville, N. Y.

THE Clydemont Nursery, formerly at 11601 Southwest Thirty-fifth drive, Portland, Ore., is now the Clyde Nursery, on Barbour boulevard near Southwest Twenty-eighth street, on a section of the new southbound Pacific highway. The new location is of the sunken garden type,

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This Business of Ours

Reflections on the Progress and Problems of Nurserymen By Ernest Hemming

LEADERS, SPECIALTIES AND NOVELTIES.

The distribution section of our business requires 'constant thought and attention to keep the buying public interested in the plants we have to sell. The catalog, advertising salesman, or whatever method we use to arouse the interest of the public should not be allowed to become too stereotyped.

Perhaps, when the nurseryman turns on the radio, he may envy those who can sing, whistle or yell about their goods whenever the public wants to hear about something else. Personally, I prefer a more subtle approach.

On the whole, the horticultural professions have a large enough public to insure interest of themselves, without the necessity of tying up their goods with a news program or a song.

The essential is to offer something new, not necessarily new to us, but to the public, to whom it may be practically unknown.

I am an old nurseryman, but there are many plants that I have grown with which I am really not acquainted, except in an immature state, and about which I could become quite enthusiastic if I could be introduced to them when they are in their full glory. Maybe we are missing a bet in our publicity in not playing up the growing, instead of the buying, of a particular plant, because, after all, the real pleasure to the purchaser comes in his success in growing the

In selecting our leaders, specialties or novelties for the coming season, our inventory list of plants may seem dull and uninteresting to us, yet to the buying public many items would be desirable novelties in every sense of the word.

For those nurseries doing a nationwide business it is not so easy to select leaders for a sales campaign, but for the nurseries whose distribution is confined to a known locality the selection of a leader for the coming season's business is a cinch. All they need to do is to select a plant that will thrive in their locality and tell the truth about it.

If we study nursery publicity or salesmanship of the past fifty years, we see that it has largely centered around the easily grown and invari-

ably foreign or introduced plants, such as Hydrangea p.g., rose of Sharon, privets, barberries, retinos-poras, Norway spruce, Norway maples and the like. In fact, they form what might be termed the common flora of our gardens. With the single exception of the dogwood, I do not recall any native plant that has received much attention from salesman-

There is a native plant known to the country people in every state along the Atlantic seaboard that would sell by the million if the nurservmen could domesticate it and that is Epigaea repens, the trailing arbutus, mayflower or ground laurel, as it is variously called. One of the first flowers of spring, with a rich spicy odor, it is a general favorite. It has always been a mystery to me why it has been so completely ignored by the commercial grower.

It would seem that plants just as difficult to handle have been mastered and put on the market. It belongs with the azaleas, rhododendrons and heaths, and these, of course, call for an acid soil, peat, sand, shade and constant moisture.

Harking back to my apprenticeship days, I recall when we were potting this group of plants, especially the heaths, the foreman would test our work by picking up a 5 or 6-inch potted plant by the plant. That called for firm potting. But maybe lack of success in cultivating the epigaea is due to our lack of meeting its symbiotic needs rather than its physical.

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URGES MEMORIAL GARDEN.

Nicolas Radovich, Portland, Ore., had an interesting letter printed on the editorial page of the Portland Oregonian last month, presenting his viewpoint as a nurseryman in advocating a memorial park garden for Portland. He believed Portland could have a city garden "with such health and beauty that it could not be duplicated anywhere in the world." He said: "Let us hope it will be located within easy reach of everyone and that it will be of outstanding landscape design, including the world's best flowering plants to carry on a long succession of seasonal blooms, according to our ideal climatic conditions. . . . The foundation planting of this garden should be rhododendrons. . . . What the British Rho-dodendron Society has done for

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uplifting public interest there, the American Rhododendron Society, which was recently organized here, with many other groups of our flower enthusiasts, could do to likewise awaken more of our public interest, with information regarding better home and public gardens."

OREGON NURSERY CROPS.

Income from sales of nursery crops in Oregon increased from \$746,000 in 1936 to \$930,000 in 1940, according to extension circular No. 380, "Specialty Horticultural Crops — 1940," published by Oregon State College, Corvallis. These crops included grafted fruit and nut trees, seedling trees, berry plants and cuttings, rose stock and ornamental shrubs, bushes and trees. The report shows that nursery acreage increased from 1,860 acres in 1936 to 2,350 acres in 1937. After 1937 there was a decline in acreage, because of a reduction in area of fruit and nut tree stock and small fruit plants and the consolidation of some old plantings of ornamentals, even though production of broad-leaved evergreens and roses was increasing. Nursery acreage totaled 1,800 acres in 1940.

According to the bulletin, in recent years between eighty and ninety per cent of the state's nursery acreage has been located in the Willamette valley, at least fifty per cent being concentrated in Multnomah county, although there are large plantings in Umatilla and Columbia counties. It is noted that conditions in Oregon are favorable to the cultivation of a large number of nursery crops, and that nurserymen's catalogs list hundreds of species and varieties of deciduous, broad-leaved and conifer shrubs, bushes and trees. Much of the marketable crop is shipped out of

The survey showed that marketing methods varied considerably, some nurserymen selling only at wholesale and some only at retail, with others combining the two. Those reporting accounted for about seventy per cent of their income through wholesale sales and thirty per cent through retail sales.

JAMES C. BOWEN has five acres of land on the shore of Lake Elsinore devoted to the propagation of fruits and nuts adaptable to southern California and will operate a wholesale business under the name of Queen Bee Nursery, Route 1, Box S-194, Grand avenue, Elsinore, Cal.

E. L. HARRIS has opened the Harris Nursery & Landscape Service at Arlington, Tex.



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FAIRVIEW, OREGON

Wholesale Only

GOOD WESTERN-GROWN NURSERY STOCK

Fruit Tree Seedlings Flowering Ornamental Trees Shade Trees

Grown right and packed right. Combination carloads to Eastern distributing points will save you on freight.

MILTON NURSERY CO.

A. Miller & Sons, Incorporators

MILTON-Since 1878-OREGON

OUR SPECIALTIES

Birches—Flowering Cherries, Crabs and Plums — Chinese Elm—Hawthorns—Li-lacs — Lindens — Flowering and Globe Locusts—Columnar, Globe, Norway and Schwedler Maples-Mountain Ash-Orgon Grape-Oriental Plane-Willows.

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Combination Carloads to Eastern dis-tributing points at minimum freight

AS ALWAYS— OREGON'S BEST SOURCE of GOOD ROSES

Our limited crop is reserved for our regular customers this year.

PETERSON & DERING

Wholesale Rose Growers Scappoose, Oregon

OREGON-GROWN NURSERY STOCK

We have a complete line of shade and flowering trees, both whips and heavier branched stock.

Flowering Cherries, Flowering Crabs, Plums and Locusts, Norway and Wiers Maples, Oaks—Chinese Elm—Mountain Ash—Birch—Hawthorns.

DOTY & DOERNER, INC.

6691 S. W. Capitel Highway PORTLAND 1. OREGON

BALED SHINGLE TOW (CEDAR SHAVINGS)

WM. A. JOHNSTON 408 Postal Bidg., Portland 4, Ore.

NOTICE

Decreased production makes it impossible to book orders for new customers. For the duration the limited supply is reserved for our regular trade.

HOWARD ROSE CO. Hemet, California

PACIFIC COAST NURSERY

Specializing in fruit tree seedlings since 1914. We also have Norway and Schwedler Maple, Chinese Elm, European White Birch, Cut-leaf Weeping Birch, Paul's Scarlet Hawthorn and Kwanzan Flowering Cherry. All 2-yr.-old stock.

> John Holmason, Prop. 2244 N. Skidmore Ct. Portland 11, Oregon

Nut Trees

SEEDLING CHESTNUTS.

I noted in the November 15 issue of the American Nurseryman the exceptions taken by Mr. Hemming to my letter in the October 15 issue concerning seedling-raised Chinese chestnuts. Apparently Mr. Hemming failed to give my communication careful reading. I offered no indictment against the sale of seedling trees of any kind, but against the practice of offering seedling nut trees under variety names. That indictment still stands.

The United States Department of Agriculture distributed some 50,000 Chinese chestnut trees in introducing the species, and I understand that Mr. Hemming's foundation stock consists of twenty-five of these trees. If these trees are of such uniform excellence as to constitute a distinct strain, he is certainly to be congratulated. He is also to be congratulated on his intelligence in selecting Maryland's Eastern Shore as the site for his nursery. It is probably the best location in the eastern United States for tree growing, and I strongly suspect this factor is largely responsible for the excellent record his chestnut trees have made.

Despite the general excellence of his planting, Mr. Hemming has, as he states, made some selections from among his best trees. I, myself, have some of these under test as grafted trees, and I feel free to predict that, if his present test orchard of 600 6-year-old trees had been grafts of his No. 16 and Hobson, all would have been bearing two years ago and present crops would exceed the present record fourfold.

True, Chinese chestnuts usually require cross-pollination, but surely this can be secured as well with grafted as with seedling trees.

Mr. Hemming states that largesize nuts are not inherent in the tree. I do not know just what he means by that. Admittedly, nut size is modified by moisture, soil fertility and ratio of leaf to fruit, as in other species. On the other hand, two seedling trees, growing under identical conditions, may produce nuts differing in size by as much as 300 per cent.

After growing many grafted trees to fruitage, and also many seedling trees of known, select parentage, I know that, at the present time, chestnut size, color, quality and bearing habits can be transmitted by asexual propagation—and by no other means.

H. F. Stoke.

NUT GROWERS' PROGRESS.

Reporting a steady increase in the number of members of the Northern Nut Growers' Association, which totaled 560 on November 1 of this year, G. L. Slate, Geneva, N. Y., secretary of the association, comments: "At present it appears that the demand for nut trees is far greater than the supply. General nurseries are seeking sources of stock and interest in sources of chestnut seeds is considerable."

The treasurer, D. C. Snyder, Center Point, Ia., reports a comfortable cash balance, although this will be reduced by the cost of printing the annual report, which is being mailed later than usual this year.

The success of nuts in the northern tier of states is attested by Carl Weschcke, Minneapolis, Minn., president of the association, who remarked in a recent letter to members:

"Nuts as a food have certainly come into their own, and the food value is so appreciated that people are willing to pay \$2 per pound for kernels of filberts and black walnuts, and only a little less for pecans and English walnuts. Chestnuts are also high-priced, and hickory nuts are impossible to obtain, although I have had many demands for these nuts. I had an unusually large crop of my own variety this year on my large grafted trees, but in spite of great vigilance I collected only about one-fifth of them; the squirrels got the rest.

"I was greatly surprised to see two small hybrid chestnut trees, about three to four feet high, set nuts, and large chestnut trees, which are now about 18 years old, had good crops. I believe I can safely say that chestnut growing this far north is practical on the right type of soil. Now that we are assured of hardy varieties of hickory nuts, filberts and hybrids, along with black walnuts, all of these species having certain varieties that ripen their nuts as early as September 15 in our climate, and with the possibility of growing chestnuts on favorable ground, I am sure that we are going to have large demands for grafted nursery-grown trees of all of these species. I am sure those who are in the nursery business have experienced, as I have, the great demand for nut trees. Conditions due to war have curtailed propagation. All those who are propagating nut trees should make an extra effort to produce more

for sale, as the demand is increasing steadily.

"The universal and growing popularity of nuts for direct human consumption need not all be supplied from the drug store and grocery store, since it is now perfectly safe for people to plant some kind of a nut tree in their backyard for homegrown nuts. I predict the popularity of the nut tree for a backyard tree could easily become as great as the apple and certainly much more nutricious."

WHITE-FRINGED BEETLE.

Revision of the white-fringed beetle quarantine and regulations was made by the United States Department of Agriculture, November 25, chiefly for the purpose of extending the regulated areas to include additional sections in which white-fringed beetle infestations have been located and to remove from the regulated area the small section in East Baton Rouge parish, La., including the city of Baton Rouge, where a light, isolated infestation formerly existed. Most of the newly added sections represent minor extensions in counties in Alabama and Mississippi that were within the regulated areas in part. The additions in new counties and parishes include Amite, La., and vicinity, in Tangipahoa parish; a small area at Piney Woods, Rankin county, Miss.; Eagles Island, in Brunswick county, N. C., near Wilmington, and part of a township in Pender county, N. C.

Modification of certification requirements was announced in a separate order November 28.

ILLINOIS STATE STOCK.

Approximately four million seedlings are available for the fall, 1944, and spring, 1945, planting season from the nurseries of the Illinois state division of forestry. Of the total amount, approximately three million of the seedlings are conifer species, such as shortleaf pine, loblolly pine, Virginia pine, pitch pine, red cedar, cypress, red pine and white pine. Transplant stock of the two last species is also available. The million hardwood species are black locust, ash, walnut, oak and Osage orange.

Tree stock produced by the division of forestry nurseries is available at low prices to all landowners in Illinois for the purpose of reforestation, erosion control and wildlife development, and cannot be used for any type of ornamental planting.

CLASSIFIED ADS

Five lines, \$1.00,

each additional line 20 cents, per insertion.

BERRY PLANTS

Certified. 6,000,000 Blakemore, Klondike, Aroma and Dunlap, Grown on new land. Excellent quality. Orders booked for fall and apring delivery. \$7.50 per 1000, 25 per cent deposit with order. Due to the shortage of strawberry plants, we advise you to book your order at once. PLANT FARM Dayton, Tenn.

BERRIES

BERRIES

We are booking orders now for spring delivery of Raspberries, Boysenberries, Youngberries, Cumberland Blackcaps and Gem
Everbearing Strawberry plants; also other
spring varieties if available.
CALAPOOIA BERRY FARM & NURSERY
Shedd, Ore.

BERRY PLANTS
Improved Eldorado Blackberry, hardy, strong, No. 1, 2-yr. field plants, bearers of large luscious fruit. \$2.00 per 100; 2000 for \$25.00. MRS. CHARLIE ROBINSON, Greenville, Ga.

THORNLESS BOYSENBERRIES, \$10.00 per 100. Dunlap Strawberries, \$7.60 per 1000. F.O.B.
R. H. DIXON BERRY FARMS, Rt. 1, Hutchinson, Kan.

EVERGREENS-Specimen

JUNIPER PFITZER and HIBERNICA
These from a new block grown on clay
am soil. Truck or carlots only.
HUMPHREYS LANDSCAPE SERVICE
Mt. Sterling, Ky.

WAX-LEAVED LIGUSTRUM
Several thousand choice plants for sale.
18 to 24 ins.; 2 to 3 ft.; 3 to 4 ft.
WATSON NURSERY,
Monticello, Fla.

EVERGREENS-Lining-out

Quality coniferous seedlings and trans-plants in assortment. Write for spring trade list, SUNCREST EVERGREEN NURSERIES Johnstown, Pa.

HARDY PLANTS

PACHYSANDRA
25,000 nice, heavy, rooted cuttings. \$5.00
r 100 or \$40.00 per 1000. Cash with order, EAST HILL NURSERIES, Chesterland, Ohio

AZALEAS
Hardy, heavy Snow and pink (native)
Azaleas, 2 to 3 ft., \$10.00 per 100; 3 to 4 ft.,
\$15.00 per 100.
MRS. CHARLIE ROBINSON, Greenville, Ga.

PACHYSANDRA From 2½-in. pots. \$60.00 per 1000. NICK'S NURSERY, Anchorage, Ky.

VERBENA
Bright pink perennial, large field plants,
\$4.00 per 100; 2000 for \$30.00,
MRS. CHARLIE ROBINSON, Greenville, Ga.

Sweet-scented Blue Violets, hardy, heavy bloomers. Large plants, \$3.00 per 100; \$25.00 MRS. CHARLIE ROBINSON, Greenville, Ga.

NUT TREES

PAPERSHELL PECAN TREES, extra-fine, budded and grafted. World's largest growers. Fruit Trees. New catalog and prices free. BASS PECAN CO., Lumberton, Miss.

BOOTS

ASPARAGUS ROOTS
Vashington, 1-yr., non-irrigated.
\$8.00 per 1000 in bulk.
ROY WILKINS
Newberg, Ore. Mary Wa

ASPARAGUS ROOTS, strong, No. 1 M. Washington, \$15.00 per 1000. Boysenberry plants, \$80.00 per 1000, ready December 16. SEBASTOPOL NURSERY CO. Sebastopol, Cal.

RUBY RHUBARB No. 1 Divisions, 22c. BERGESON NURSERY, Fertile, Minn.

SEEDS

PEACH PITS
Southern collected, high germination, \$3.00
bu. Peach seedlings for budding or grafting,
\$25.00 per 1000, 100,000 Boxwood. Prices right.
RIVERDALE NURSERIES, Riverdale, Ga.

SHRUBS and TREES

Red Cedar, Pine, Magnolia Glauca, 12 to 18 ins., 10c each.
Red Maple; Liquidambar Styraciflua (sweet gum); pink fragrant-flowering Crab Apple; Plum; heavy bearers of sweet red and yellow fruit; 1 to 2 ft., \$6.00 per 100; 2 to 3 ft., \$12.00 per 100.
MRS. CHARLIE ROBINSON, Greenville, Ga.

HONEYSUCKLE
Lonicera Halliana Japonica (Hall's Honeysuckie), strong No. 1. 2-yr., field-grown;
three to four 18 to 20-in. leads. Carefully
graded. selected plants, \$4.00 per 109; \$30.00
per 1000. Lighter plants, \$20.00 per 1000.
Immediate shipment.
MRS. CHARLIE ROBINSON, Greenville, Ga.

25,000 QUERCUS BICOLOR (Swamp White Oak), 6 to 12 ins. Order in units of 100.
\$20.00 per 1000; \$2.50 per 100.
Send orders now. Delivery to be made when weather permits.

VERHALEN NURSERY CO.
Scottsville, Texas

VINCA MINOR, Bowles variety, 4 yrs.
Many runners, Excellent growth.
\$10,00 per 100.
Peat Humus, 2-bushel bag, \$1.15, F.O.B.
SYLVANIA NURSERY & PEAT CO.,
New Galliee, Pa.

CORNUS FLORIDA.

Hardy, heavy, mammoth-flowering white
Dogwood, 2 to 3 ft., \$10.00 per 100; 3 to 4
ft., \$15.00 per 100.

MRS. CHARLIE ROBINSON, Greenville, Ga.

Send for new Fall list of ORNAMENTAL TREES, SHRUBS and EVERGREENS, both liners and whip-grade stock. THOMAS B. MEEHAN CO. Dresher, Pa.

AZALEAS
Hardy, heavy Snow and pink (native)
Azaleas, 2 to 3 ft., \$10.00 per 100; \$75.00 per 1000. MRS. CHARLIE ROBINSON, Greenville. Ga.

WHITE FLOWERING DOGWOOD. A fine block of 500, 5 to 6 and 6 to 7 ft. Given space.

Nursery-grown.
C. A. MAUZY & SON. Columbus, Ind.

Hall's Japanese Honeysuckle. Also Hall's Japanese transplants, No. 1. Many varieties L.O. seedlings, Write your wants. TARLTON NURSERIES—Morton Bros. R. 7, McMinnville, Tenn.

HONEYSUCKLE (Hall's Japan) Lining-out, \$12.00 per 1000. 2 and 3-yr.-old plants, \$5.00 per 100. BURKMAN'S NURSERY Roscoe, Ill.

Surplus Stock can be easily and quickly turned into

listing it in the

American Nurseryman Classified Ads.

DECORATIVES

DECORATIVES
New 1944 (lean, selected Gum Balls, Pine
Cones, Chinaberry, Jimpson, Cotton and
Magnolia Pods, Pine Needles, berried Cedar,
green Vine Roping, various colored; bright
Sprays and Leaves. Liberal samples of all,
\$5.00.
MRS. CHARLIE ROBINSON, Greenville, Ga.

LOBLOLLY CONES
3½ to 4½ ins., box of 100.....\$2.00
6 to 8 ins., box of 1 bu.
MARYLAND NURSERY, Edmonston, Md.

CHRISTMAS TREES
Car and truckloads. Pine, Cedar, fresh cut.
Hall's vine roping, any size. Liberal sample
of all sizes, \$10.00,
MRS. CHARLIE ROBINSON, Greenville, Ga.

CHRISTMAS TREES, nursery-grown, 3 to 15 ft. Black Hills, White, Norway and Colo-rado Spruces. No shipping. EVERGREEN NURSERIES, Lowell, Ind.

SUPPLIES

WAXES

Book your orders now for:

Nursery-Dip-Wax for roses, shrubs.
Trowbridge Grafting Wax—
tops in grafting material.

Treekote for your pruning compound.
Write for prices.
WALTER E. CLARK & SON,
Milford, Conn.

GIBRALTAR Frost Covers pay for them-selves, Economical, long-lasting, also ideal for windbreaks, 6 ft., wide; 50 ft., \$13.75; 100 ft., \$25.00; 150 ft., \$33.00. NEW AMSTERDAM IMPORT CO., 122 Chambers St., New York 7, N. Y.

FLATS 12x20x3, Tamarack, 15c; Cedar, 17c each. nock-down 14x20x3, 2c more each. Small supply. OSCAR C. STONE R. 1, Manistee, Mich.

SELFMADE Paper Pots. Fold them yourself and save the difference. Approx. 2x2x3 ins., \$1.50 per 1,000, in cartons of 4,000 each. Cash with order. F.O.B. R. GRAH, 1428 Highland Ave., National City, San Diego Co., Cal.

COTTONETTE Squares are best for balling. Saves time and twine, All sizes in stock. Write for prices. NEW AMSTERDAM IMPORT CO., 122 Chambers St., New York 7, N. Y.

If you don't find what you want try a Classified Ad under the heading "Wanted." It's cheaper than mailing out a want list.

PECANS (Papershell)

WANTED

WANTED: Transplanted understocks as

Acer palmatum Juniperus virginiana Cornus florida Magnolia kobus

Magnolia kobus
Magnolia acuminata
Magnolia glauca
Picea excelsa
Please quote prices in lots of 1000 to 5000.
HESS' NURSERIES,
P. O. Box 52, Mountain View, N. J.

WANTED—UNDERSTOCKS
For delivery this fail or next spring.

1000 Fagus Sylvatica

1000 Cornus Florida

5000 Acer Palmatum

1000 Magnolia Kobus, Glauca or Acuminata

BURTON'S HILL TOP NURSERIES

Casstown, O.

WANTED: 5,000 seedling or collected Fern-leaved Bleeding Hearts for late fall or spring delivery. Your prompt quotation will be greatly appreciated. SHENANDOAH NURSERIES, Shenandoah, Iowa.

WANTED: For cash, anything up to 50,000 Taxus Cuspidata Capitata liners, 10 to 12 inches, or 12 to 15 inches. Early spring GARDNER'S NURSERIES, Rocky Hill, Conn.

WANTED for spring delivery, lining-out stock of Evergreens, Deciduous Trees, Shrubs and Blue Spruce grafts, Send trade list to F. THRINE NURSERY Batesville, Ind.

WANTED
Wholesale catalogs and prices on seeds and lining-out stock.

P. J. Port 407 MOON FARMS

R. 1, Box 407 Ellerson, Va.

PRONOUNCING DICTIONARY

of Plant Names and Botanical Terms

3000 names 64 pages 25 cents per copy

AMERICAN NURSERYMAN 343 S. Dearborn St. Chicago 4, Ill.

OBITUARY

Harry W. Burgess

Harry W. Burgess, founder of the Burgess Seed & Plant Co., Galesburg, Mich., died November 24 at the Mayo clinic, Rochester, Minn., following an operation. He was 65 years old.

Mr. Burgess was a member of the Congregational church and the Masonic order. He was a past president

of the Exchange Club.

Surviving are his widow, Margaret, and two sons, Elden H. and David E. Burgess. Burial was at Kalamazoo, Mich. Elden will take over his father's duties, and the 32-year-old business will be continued by the two sons, who will maintain the usual high standards.

Bela K. Kallay.

Bela K. Kallay, president and general manager of Kallay Bros. Co., Painesville, O., died unexpectedly from a heart ailment, at 9:30 a. m. December 1, at his home. Death followed a lingering illness from which Mr. Kallay had been convalescing after a four months' stay in the hos-

pital.

Born May 15, 1879, at Papa, Veszprem M., Hungary, Mr. Kallay devoted most of his life to agriculture, specializing in floriculture. At the time of his death, he was one of the outstanding nurserymen of Ohio. At the age of 13 he took up the study of horticulture and in 1896 graduated from the Royal Hungarian Gardens, at Budapest. The same year he came to the United States and entered the employ of the Sorrs & Harrison Co., Painesville.

In 1906 he organized a mail-order seed house under the name of Kallay & Varga. After the death of his partner, Anton Varga, he formed the partnership of Kallay Bros. Co., with J. W., Paul G., James, Charles and Jennings Kallay. At the same time the firm entered the nursery business, which is carried on today. The company was incorporated in 1927, with Bela Kallay as its president and gen-

eral manager.

The company is a member of the American Association of Nurserymen, Ohio Nurserymen's Association and Lake County Nurserymen's As-

sociation.

Surviving Mr. Kallay are his widow, Caroline; his mother, Mrs. Sebastian Kallay; three daughters, Mrs. Helen Nemeth and Mrs. Rose Sebian, both of Painesville, and Anita, of Miami, Fla.; a son, Bela K., Jr., of Wyandotte, Mich.; a sister, Mrs. Mary Szabo, and five brothers,

CLOVERSET POTS ARE AVAILABLE



Now made in four sizes, comparable in soil capacity to 6-in., 7-in., 8-in. and 9-in. clay pots. Prices as low as \$22.50 per 1000.

Cheap in price (can be given away with the plant). Non-Porous (slow to dry out), produce a better plant than a clay pot, make better satisfied customers and more profit for the Florist and Nurseryman. Order early, for freight shipments are slow.

Cloverset Lightweight Pots have been discontinued for the duration. Send for free circulars and prices. Sample carton sent by mail for 25c.

CLOVERSET FLOWER FARM, ERNEST HAYSLER & SON

105th & Broadway Kansas City 5, Mo.

Send for New Seed List. A. B. C.

"Supreme" Quality

SEEDS - PLANTS - BULBS and

Growers' Accessories

AMERICAN BULB CO.

1335 W. Randolph St. CHICAGO 7 31 W. 27th St. **NEW YORK 1**

North Dakota and Montana Seeds

Northern-grown Tree, Shrub and Wild Flower seeds. Wholesale crude botanicals.

E. C. MORAN Stanford, Mont.

J. W., Paul G., Charles, James and Jennings, all of Painesville.

George H. Starr.

George H. Starr, nurseryman at Turlock, Cal., died at his home November 25 following a long illness. He was 60 years old. Mr. Starr, who developed and grew extensively Gypsophila starri, was born at Greensboro, N. C., and graduated from Duke University, Durham.

He is survived by his widow, Mrs. Jennie V. Starr; a foster son, Capt. John J. duBois, with the army air forces; one sister, and one brother.

Claude Milton Bell.

Claude Milton Bell, Zellwood, Fla., died November 27, aged 61. He entered the nursery business in 1922. when he and his wife moved to Zellwood from Bryan, Tex., where he had been associated with his brother in a grocery business.

Mr. Bell was active in several organizations, including Woodmen of the World, Knights of Pythias, Apopka Rotary, of which he was vice-president, and Orange County Fern Growers' Association, of which he was secretary-treasurer for twelve

MYROBALAN SEED LOVELL PEACH PITS

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Help and Situation Wanted and For Sale advertisements.

Display: \$2.50 per inch, each insertion. Liners; 20e line; Minimum order \$1.00.

SITUATION WANTED

Middle-aged man, now employed, married and in excellent health, seeks position as nursery manager. Experienced in all branches, wholesale and retail, propagating general nursery line and handling men. Address No. 331, American Nurseryman, 343 S. Dearborn, Chicage 4.

SITUATION WANTED

Sales manager with qualifications to organize and teach landscape planning. Several years expricing the nursery several state of the property of the several s

HELP WANTED

Established nursery in city limits wants reliable nurseryman with execu-tive ability. Good opportunity for right man. Write qualifications and references

MALMO NURSERIES Seattle 5, Wash.

HELP WANTED

Greenhouse Man

Operator for small nursery greenhouse producing evergreens, bedding plants and perennials.

MALMO NURSERIES Seattle, Wash.

He is survived by his widow, Mrs. Betty L. Bell; two adopted daughters, Erline Bell and Mrs. H. L. Voss, and one grandson, Lewis Claude Voss.

For the duration the nursery business will be operated by Mrs. Bell, and after the war she will be assisted by her son-in-law, H. L. Voss, who has recently returned from Italy, after serving fifteen months with the Thirty-sixth Division.

A. B. Willoughby.

A. B. Willoughby, 1227 Bonita avenue, Berkeley, Cal., died suddenly November 28. He was a member of the firm of Bennett, Hickman & Willoughby, florists and nurserymen, operating at Contra Costa, San Pablo and Berkeley.

Edward W. Weimar.

Edward W. Weimar, retired nurseryman and landscape architect, died at his home at Greenwich, Conn., November 30. He was 81 years old. Mr. Weimar in 1918 directed both the clearing of land and building of the airport at Lakehurst, N. J.

Surviving are his widow, Mrs. Laura Huss Weimar; one son, Edward W. Weimar, Jr., and one daughter, Mrs. William A. Hillis.

ROSS WOLFE, proprietor of the Wolfe Nursery, Stephenville, Tex., last month underwent a major operation at Johns Hopkins hospital, Baltimore, Md. After his convalescent period, he and Mrs. Wolfe drove from Baltimore to Stephenville, arriving home November 23 after five days on the road. Mr. Wolfe is regaining his strength and health and hopes soon to be able to assume the full management of the business.

THE Superior California Nurserymen's Association, at its meeting December 6, at the Alhambra Italian restaurant, Sacramento, heard Irvin M. Ingerson, of the California state engineers' office, talk on the central valley water project. He illustrated his talk with moving pictures of the new dam...

IN addition to his present planting of roses and annuals on three acres at 1711 South E street, Owen N. Seaney, Richmond, Ind., has acquired thirtyeight acres four miles south of Richmond, where he has started an evergreen nursery.

LIEUT. FLOYD BASS, JR., son of the proprietor of the Floyd Bass Peony Farm, New Augusta, Ind., is now with the 15th Air Force in Italy. Air Cadet Kaye Bass is scheduled to graduate in January from the advanced navigation school of the army air force at Monroe, La.



WE ARE NOW Offering a Limited Number of our

NURSERY HAND TRUCK

It will help to solve your labor problem.

Price, complete with Balloon Tires, \$35.00 F.O.B. Kansas City

May we express our appreciation to the many nurserymen who waited patiently until we could fill their orders. We are, at present, only a few days behind. The 4-ply tires, now standard equipment, are ample justification for the increased price.

THE GARDEN SHOP, Inc.

4819 Mission Rd.

Kansas City, Kan.

To the Nurserymen of America

HOLIDAY GREETINGS

and our best wishes for the coming year.

Congratulations, too, on the splendid job you did in '44.

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Magazine and Newspaper Advertising Catalogs, Folders, Tags, Labels.

Harrisburg, Pa. <u>REFERENCIAL CARACTAR AND A PART OF THE PA</u>

SOIL TEST LABORATORY Of Your Own

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SUDBURY PORTABLE SOIL TEST LABORATORY

SOIL TEST LABORATORY
The most valuable piece of equipment you can own, giving you the soil information that you need for efficient production. Widely used by estates, professional growers and government field stations. Will last almost a lifetime with refills. Comes in instrument type, soild mahogany case. No chemistry knowledge required. Complete with instructions and helpful chart. SEND NO MONEY. Order C.O.D. \$22.50, plus express charges (or send \$22.50 and we pay express). Money back guarantee.

Dealers Write for Special Offer.

Dealers Write for Special Offer.

SUDBURY SOIL TEST LABORATORY 811 Dutton Road So. Sudbury, Mass.

CHARLES SIZEMORE **Traffic Manager** 319% Georgia St., Louisiana, Mo.

Specializing in matters regarding the nursery industry of America. Commercial collections. Traffic matters before the Interstate Commerce Commission. Freight bills audited.

For 20 years secretary and traffic manager of the American Association of Nurserymen and well known to the nursery trade.

Reference: Bank of Louisiana, Mo.

LET US SHOW YOU HOW TO MAKE A BETTER COMPOST

An activated compost, prepared by the Howard Process, can be matured in about 90 days. Far superior to compost made in the old way. Our 64-page book "Compost—How to Make It" will be sent free upon receipt of subscription to ORGANIC GARDENING Magazine one full year at \$2.00. Send \$2.00 today and save many dollars on chemical fertilizers.

ORGANIC GARDENING Dept. 31-W, Emmaus, Pa.

E-Z CREPED WATERPROOF—The New Nursery Wrap

Light weight combined with strength—Pliable and easy forming.

Will not support mildew, fungus or moths. Mice or vermin will not eat through it.

In 200-yard rolls 24, 36, 48 and 60 inches wide. Sheets to your order.

Reasonably prompt delivery

Write for samples and prices

EAGLE WRAPPING PRODUCTS CO.

Packing Supplies for the Nurseryman

312-330 North Carpenter Street

Chicago 7, III.

A limited quantity available for immediate shipment in 30/30/30 plain waterproof in 200-yard rolls 18, 24, 36 and 48 inches wide.

OUR INDUSTRY AFTER WAR.

[Continued from page 11.]

some concerns already expanding their production to unprecedented levels, how long will it be before we again reach the explosive situation of the 20's? I hope we may never find this industry in those conditions again, but I can see the start toward them in 1944. After the last war the industry was stimulated by quarantine 37 and a period of great economic activity. The bubble of prosperity lasted from 1922 to 1929. After this war we shall again see a period of great economic activity, and of importance to us is that portion of our economy related to construction. The census bureau estimates that there will be 4,100,000 new urban families in the first postwar decade and 1,400,000 more families to be established or reestablished in homes by men in service. Congress has re-cently passed the federal aid highway bill, which authorizes the expenditure of one billion dollars a year for three years for highway construction. Parks and parkways are waiting only for labor for development. The federal air-park program is another postwar program which we view with considerable interest. However optimistic the postwar market may look, we must guard against a repetition of the bonfires of the early depression days.

Manufacturing industries have their industry statistics running back many, many years. Their production is keyed to other economic statistics, enabling them to predict the market of the future for their commodities. Crop reporting services are maintained for the basic agricultural crops of the country; statistics on exports and on domestic consumption and related data are available from which surpluses or shortages may be predicted. What has our industry to guide it? Only the general knowledge that more home construction, more highway building, etc., means more



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nursery stock sales. We need industry statistics and we need them badly. We should have now statistics and accurate ones on 1941, 1942, 1943 and 1944 propagation. These data can now never be obtained. We need data on the production of understocks, on availability of finished and semifinished stock and ready for mar-

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ket in 1945, 1946 and 1947. Without data, production will be by guess, and I predict a lot of poor guesses will be made. Why cannot this industry collate its production data to guide it in its future activities and prevent a repetition of 1929? It is a large order, to be sure, but not impossible of filling, and the need should be apparent to us all.

The internal management of each unit in the industry is to play an important part in success or failure in the postwar period. Economical production and distribution are going to be a prime necessity. It is the unit cost of producing and merchandising a plant that counts. Losses in overproduction represent an added cost to those plants that are sold. Inefficient use of land is waste and adds to costs. Inefficient labor, usually cheap labor, is expensive. All mechanical aids and short cuts in production and handling, many of them developed of necessity during the war, must be kept at work and others devised. Every means of curtailing unit production and distribution costs must be found. The margin may be smaller and may disappear entirely unless the management is constantly alert.

I have attempted to stimulate your postwar thinking. We are facing a period similar in many respects to the decade after the last war. May we not look back in 1970 to say, "What fools we were!" There is an apt saying to fit the situation, "Burn me once, shame on you. Burn me twice, shame

on me."

OAKLAWN NURSERIES, INC., Cranston, R. I., was recently incorporated by James Williams, Cranston; Anna Wilson, Cranston, and Agnes L. Bruno, Providence. The incorporators plan to grow and sell shrubbery, flowers and plants.

AMONG speakers at the postwar garden conference held November 29 at the Biltmore hotel, Los Angeles, Cal., under the direction of Norvell Gillespie, Pacific coast director of the National Victory Garden Institute, Jack Evans spoke on "The Nursery Stock Outlook for 1945" and Manfred Meyberg on "The Seed Outlook for 1945."

REUBEN C. RETTKE has under construction a new store building, 25x88 feet, for his nursery and seed business, which he operates as Rettke's Seed & Nursery Store, at South Saginaw and Water street, Flint, Mich. Adjoining is a lot, 70x88 feet, for his outdoor display of evergreens and other nursery stock. The location, located in the downtown section of Flint, has a railroad siding.

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Wilmette, III.

FIREPROOFING CHRISTMAS TREES.

As the Christmas season nears, information on fireproofing Christmas trees again is in request. The tree and its decorations constitute a fire hazard, and the longer the tree is kept inside, the greater the risk becomes. A freshly cut tree does not catch fire easily, as it contains much water, but when the water evaporates the resinous substances in the tree, especially abundant in the needles, flare up quickly and violently.

The fire hazard of Christmas trees can be reduced appreciably by a simple method described by the United States Department of Agriculture. The most effective results are obtained with freshly cut trees treated four to sir days before they are decorated. The longer the treatment is delayed after cutting, the less effective it will be. About the best material for fireproofing is ammonium

It is effective, cheap and easily obtained. To determine the number of pounds of ammonium sulphate needed, weigh the tree and divide the number of pounds by four. Dissolve the required amount of ammonium sulphate in water, one and one-half pints for each pound. Saw at least an inch off the stem and place the freshly cut end of the tree in the solution. Set in a cool place, at 55 to 65 degrees, until the solution is absorbed.

Cotton used under Christmas trees to simulate snow is another fire hazard that may be reduced by a simple treatment. Dissolve seven ounces of boric powder and one and one-half ounces of soap powder in two quarts of hot water. Absorbent cotton is treated more easily, and the soap powder should be omitted. Spread out the cotton and sprinkle the warm solution over it. Allow to dry thoroughly before handling.

CORP. WILLIAM FLEMER III, of Princeton, N. J., is now with the engineer corps in France, his address being Co. C., 603rd Engnr. Cam. Bn. Sp., 23rd Hdq. Special Troops, APO 655, c/o Postmaster, New York.

W. D. (DICK) GRIFFING, who was associated with his uncle, Walter C. Griffing, of the Griffing Nurseries, Beaumont, Tex., visited with the family last month. Since going into the service of the merchant marine as chief radio operator, Dick has made several trips on supply ships to European ports. His last trip was to Italy and points of the Mediterranean area.

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